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ABSTRACT

This volume includes materials that clearly indicate the state of the development of the field of higher education. The members of the Association of Professors of Higher Education gathered in their third formal national conference to read and discuss the materials included here. The ideas and information presented in this edited, and relatively condensed, set of papers are good evidence that higher education is truly developing as an important field of study. After the introduction by Fred F. Harcleroad the papers are as follows: "What Role for Professors of Higher Education?" by Samuel E. Kellams; "The Professor-Disciplinarian" by Burton R. Clark; "The Professor-Administrator" by Joseph F. Kauffman: "The Professor-Policy Analyst" by Alexander W. Astin; "The Professor-Editor" by Robert J. Silverman; "Survey of Higher Education Programs" by Paul L. Dressel, "Problems and Issues in Programs in Higher Education" by Lewis B. Mayhew; "Doctoral-Level Graduates With Higher Education as a Specialized Field of Study" by William D. Carr; "Characteristics of Several Current Doctoral Programs and of Members of APHE" by Naomi Ross; "Some Thoughts on the Service Role of Departments of Higher Education" by E.D. Duryea; and "Center for the Study of Higher Education; A Consultant in Resident Role?" by G. Lester Anderson. (Author/PG)

ED 104 311

The Impact of Education: A Developing Field of Study

Fred F. Harcleroad (Editor)

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INTRODUCTION

Fred F. Harcleroad

Every developing academic field of study goes through a relatively long and sometimes painful gestation period. Even in the more exact sciences such as biochemistry, biophysics, or astrophysics the interdisciplinary nature of the new developing discipline has not been easy. In the less exact social and behavioral sciences the problems of melding two or more disciplines are even more complicated. In addition, subfields which grow out of existing fields of knowledge pursue an arduous path in the development of their independence as a separate discipline. Natural philosophy in the college curriculum of 2 centuries ago spawned many of the exact sciences. Political philosophy served as a source for political science, economics, and related disciplines. From economics during the past century, we have developed sociology, and psychology developed from an interesting mix of older disciplines. The resulting study of social psychology during recent decades illustrates very well this continuing developmental process which grows from new social institutions and the exponential increase in our knowledge base.

Current development of graduate programs in higher education is a prime example of this process at work. As a field it is progressing through many of the same steps followed by other recently established interdisciplinary fields of study which are based on content from a number of other existing disciplines. Typically, scholars in such a new field study themselves and their discipline very carefully. Often, some of the fine thinkers in a new field raise the most serious questions. Parenthetically, we might consider the struggle of the first protagonists for "American" literature when most of their fellow scholars insisted it was only one of many parts of English literature. In the same way, some scholars in the field of higher education emphasize that it is a limited although important part of a number of other social science fields, such as economics, political science, sociology, psychology, cultural anthropology, and history.

This present small volume includes materials which clearly indicate the state of the development of the field of higher education. The members of the profession gathered in their third formal national conference to read and discuss the materials included here. Attending members of the group seriously considered justifications for the establishment of departments of higher education. Different models were described, with varying reasons presented to justify them. Questions regarding quality of programs were raised seriously and debated at length. Obviously, the gestation period is well underway. The ideas and information presented in this edited, and relatively condensed, set of papers are further important "grist for the mill," and good evidence that higher education is truly developing as an important field of study.

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The Knowledge Base of Higher Education

INTRODUCTION BY SAMUEL E. KELLAMS

BURTON R. CLARK • JOSEPH F. KAUFFMAN
ALEXANDER W. ASTIN • ROBERT J. SILVERMAN

SECTION I

WHAT ROLE FOR PROFESSORS OF HIGHER EDUCATION?

Samuel E. Kellams
University of Virginia

Knowledge about the institution of "higher education" ranges from the highly theoretical and often fragmented research done by persons in the disciplines, utilizing a consistent conceptual framework and an accepted methodology, to the more immediately practical, "how-to-do-it" knowledge which is problem oriented, situation specific, and directly useful to administrators and others in daily operation. Something in between—the analysis and recommendation piece (or policy relevant research, if these are the same thing)—has been identified by Hobbs and Francis as perhaps the most frequently published knowledge about higher education. These types of research and publication efforts seem to have different goals, different audiences, and different kinds of authors, and are disseminated in different ways. A case might be made for the value of each type. And, in principle at least, a "professor of higher education" could become involved in any or all of these knowledge generation, application, and publication efforts.[1]

The purpose of this section is to assess the research efforts going on in the study of higher education, from a variety of perspectives: The "professor-disciplinarian," the "professor-administrator," the "professor-policy analyst," and the "professor-editor." They raise questions such as the four listed below and try to answer them:

1. What contribution do the disciplines make to the study of higher education (or "practical" knowledge, or "policy relevant research")?

2. For whom and for what purposes are these different approaches useful?

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[1] An analysis of the knowledge base for the field of higher education will be published in a forthcoming 1974 issue of the journal, *Research in Higher Education*, as follows: Samuel E. Kellams, "Research Studies on Higher Education: A Content Analysis."

3. How are the different types of knowledge effectively disseminated?

4. What role does, could, or should, the professor of higher education play?

THE PROFESSOR-DISCIPLINARIAN

Burton R. Clark
Yale University

Professors in the various disciplines have contributed and continue to contribute to the study of higher education. Disciplines are characterized by the different analytical perspectives or conceptual frameworks and the particular methodology used to gain knowledge. The concepts and methods in the several social sciences have been most appropriate for analyzing higher education.

However, the current contributions of the social sciences have been very uneven. Certain disciplines and subdisciplines have had a substantive interest in the study of higher education and others have not. For example, analytical perspectives have been brought to bear by sociologists whose subspecialty in social stratification has dealt with social class differences, social mobility, and inequality in higher education. In political science the current working knowledge of political behavior has been used in the study of the politics of higher education. Yet the political-theory people in political science have shown little interest in higher education. From a number of disciplines—sociology, psychology, and business to name three—a body of "organizational theory" has been fruitfully applied to problems of governance and organization of institutions and systems of institutions of higher education.

Just as the disciplines and subdisciplines differ in their substantive concern for the study of higher education, they differ also in the specificity of their methodology. For example, economists have developed relatively advanced tools of analysis which allow them to work effectively on specific problems of educational finance and, consequently, to offer highly specific recommendations. In contrast, political scientists and political sociologists who are interested in the broad issues of governance and legitimacy have much cruder methodological tools and really are not in a position to offer specific recommendations. The best studies in this area are relevant to practice only in the broader sense of offering new ways of approaching and comprehending reality.

Contributions from the social sciences to the knowledge base of higher education develop in a relatively laissez-faire manner. There is some governmental and foundation encouragement or discouragement of certain lines of research through funding and grant priorities. Researchers are influenced as "practical problems" catch their attention. Nevertheless, the basic momentum is internal to the disciplines. That is, the study of higher education by social scientists waxes chiefly as it connects with the ongoing self-defined interests of the various specialties within the several disciplines.

In sociology, for example, we now get some contribution from the discipline to the study of higher education because of the connection with the following specialties:

1. Social stratification. A viable specialty focused on social background, mobility, educational achievement, and social equality.

2. Social psychology. There is now a viable study of student values and attitudes and student life.

3. Organizational theory. There is an increasing amount of work on organization, governance, legitimacy, and conflict of, and within, institutions of higher education.

4. Sociology of the professions. There has developed an interest in the study of the academic professions.

5. Sociology of science. The social organization of scientific activity within universities is a growing area of inquiry.

In contrast to these promising developments, and despite the vast amount of writing on student discontent in the late 1960s and early 1970s, it remains unclear whether any meaningful portion of that writing will connect with one or more subdisciplines in sociology or political science. The study of student movements may develop as a part of political sociology, but currently that literature remains without solid footing in an evolving disciplinary base. It was a literature generated by the headlines that may deflate with the loss of the headlines.

The foregoing is a sketch of the current state of the social sciences in relation to the study of higher education. What can we expect from these disciplines in the future? Do not expect wholistic, take-everything-into-account contributions. There is no comprehensive science of higher education in the making. Rather, expect at best some useful angles of vision of slices of the situation. Social scientists are specialists, and they are effective only when they are allowed to specialize; that is, they must be allowed their tunnel vision. Down their different tunnels, they can sometimes be very illuminating. They can turn on a light where no one else sees very well. But the job of integrating what is known from the various disciplines about higher education depends upon generalist-type

professors of higher education, or upon a few men in history and the social sciences who make it their business to be familiar with several of the disciplines and attempt to write in such a way that they take into account many of the different facets of a phenomenon. For example, the historian Walter Metzger is such a man in writing on the American academic profession. He knows the profession in historical depth; he knows its current problems. His interests embrace history, political science, sociology, and some economics.

To summarize. We must recognize that the disciplinarians are, first, disciplinarians, and will behave as such, including a preference for publication in their "own" journals. Only a few among them will have an important secondary interest in disseminating their findings to the field of higher education. The latter task remains a very important one for those professors of higher education who do not specialize in a discipline, but instead take as their first responsibility the monitoring and integration of findings from the disciplines.

THE PROFESSOR-ADMINISTRATOR

Joseph F. Kauffman
University of Wisconsin

I would want to make clear at the outset that I have not surveyed all recent research literature in the preparation of my remarks. Yet I am generally familiar with that literature. It is my distinct impression that much of the literature on the reading lists I recommend to my students is not written by professors of higher education. It is also my impression that some of the more academic and theoretical literature on higher education is difficult to relate to the practice of administration in higher education.

As you will quickly perceive from my remarks, I happen to think that the quality of administrative leadership is vital to the future of our institutions and systems of higher education. I speak as one who wishes to elevate the preparation of future college and university administrators.

For the most part, published academic research, with its discipline base, usually concludes with a very brief statement of "discussion" or "implications" of the research findings and a much longer statement on "suggestions for further research." It is, of course, understandable that further research possibilities are of more interest to researchers than the application of their findings.

Yet we know that patrons of research efforts, including government agencies, are frustrated by the "utilization" problem. I think that we, in this field, have an opportunity and responsibility to take discipline-based research and interpret it in terms of *application* in college and university administration, organization, governance, and goal-setting.

As the "professor-administrator" on this panel, I am frank to say that I find immediate utility in publications such as the *Chronicle of Higher Education*, *Change Magazine*, and various association or clearinghouse newsletters. To illustrate: the November 26, 1973, issue of the *Chronicle of Higher Education* contains a "Special Report on Collective Bargaining." Its five or six pages contain a definitive listing of all institutions with faculty collective bargaining agents; a report of a variety of experiences from both faculty and

administration points of view, a listing of books, pamphlets, and bibliographies on the subject; and a rather complete descriptive outline of what is actually contained in a faculty collective bargaining contract. An administrator or student, so motivated, could become fairly well informed from such resources. When, as an administrator, I first confronted the issue of collective bargaining there was little help available from any literature.

I recognize that the issues facing administrators may be of a transitory nature and that research may not be able to keep up with all matters of current concern. The subject of student unrest and disruption is a good example of this problem. Most of the publications on the subject were published well after the problem had ceased to be of crisis proportions.

In my own teaching, I know that I would find great use for well-prepared case studies of a contemporary nature. (Most of the published ones I have surveyed are hopelessly out of date.) Case studies can be a useful way of conveying knowledge, experience, principles, and the "art" of administration. Since very few adequate case study materials are available, I must assume that the careful and creative preparation of a case study of administrative practices, principles, and conflict is not viewed as respectable research. I regret this and believe that our students are the poorer for this.

I think that administrators—including those on the "firing line"—can contribute a great deal to improving the knowledge base in the study of higher education. If they are approached properly, as ethnographers and anthropologists must learn to do with their research subjects, a great deal can be learned from them about the practice of administration.

Among those about to embark on administrative assignments, there is a drive to learn about what actually is being done by others in similar circumstances or predicaments. My own experience teaching in the Institutes for Academic Deans (American Council on Education) reinforces this perception. There is an eagerness among these newly appointed deans to learn how others actually do things, and to seek examples.

Some of the most serious and difficult problems in administration are not even put into writing, let alone submitted to objective research analysis. Some are even difficult to discuss because of the controversy and value-laden connotations they engender. I am speaking of the problems connected with implementing affirmative action programs, the problems of dealing with militant special interest groups, racial and ethnic conflicts on campus, problems of remediation with new kinds of students, and the like. These are tough and explosive issues which administrators must face. Yet, we find it difficult to talk of them dispassionately, and little helpful research exists or is underway.

Many of my graduate students possess superb research skills and many have a sound discipline base in the behavioral sciences. Yet the tendency is to make higher education or administration a discipline itself, rather than to apply and integrate discipline-based knowledge. The more academic the

research, the more status it achieves in the peculiar academic society in which we work.

I am all for "theory development" as Professors Hobbs and Francis advocated at this meeting last year. But I think we divorce theory from practice at our peril. It is my own view that as a field we are more like public administration than political science, and as professors we are more akin to engineers than to physicists.

What do administrators need to know to be effective in the days ahead? Certainly we can include in our listing improvement in the quality of leadership, more effective relationships with boards of control, coordinating boards and legislatures. Certainly we can include a better understanding of purposes and objectives and the whole host of public policy issues that impinge on higher education. The economists, and their econometric models, seem to have the highest status in the discussion of such matters. Beyond these are the matters of management systems, program-planning-budgeting systems, long-range planning, and other management techniques and tools, knowledge of which has become indispensable. Almost all will face the problems of steady-state staffing, affirmative action requirements, collective bargaining, faculty development and student relations. (The list is endless.)

From my standpoint, as the "professor-administrator" on this panel, I think we have to generate and teach knowledge that will be useful to these opportunities, challenges, techniques, and problems. Analogies are always dangerous, but I would like to suggest that as with the law, we can often argue the proper wording of statutes when the real problem may be enforcement. So with higher education, we can talk forever about goals and objectives, but the problem is also how to achieve them. Our special area of competence must include knowledge and skills for the *implementation* of wise policies and good ideas!

Finally, I would observe the problem of "lag" which often confounds the utility of our research in higher education. The publications of the Carnegie Commission on Higher Education illustrate the problem very well.

I close with this example. One of the most recent Carnegie Commission publications is *Leadership and Ambiguity: The American College President*, issued in December 1973. Lewis Mayhew has termed it a "strange book" in his critique of it. Although I agree, I also found it brilliantly provocative in the playful theory it explores and propounds, although none of the theory seems to me to flow from the data uncovered in the study of a national sample of college and university presidents.

Professor James G. March, coauthor of the study, wrote to me in December, thanking me for being one of the 42 presidents who served as research subjects, and informing me that a copy of the book was on its way to me. He also indicated that some follow-up study with the subjects would be undertaken in the near future. I point out that the letter was sent to me c/o Rhode Island College. I responded to Professor March that he would have to

do his follow-up study with my successor. I also informed him that a cursory look, on my part, over the names of the 42 presidents who were his research subjects in the spring of 1970, revealed that 45% had resigned, retired, or for some reason were no longer in those presidencies as his book was being published. (The percentage may be higher, for I arrived at this figure purely on the basis of personal knowledge concerning the people involved.) As one who intends to make the study of the college presidency a major research interest, I found this fact of a 45% change, prior to publication of the research findings, more significant than any of the data in the study.

For those of you who wonder if one can make the transition from administrator to professor, let me close by stating that I am enjoying the role of professor of higher education and hope to add something to the "knowledge base" in the future.

THE PROFESSOR-POLICY ANALYST

Alexander W. Astin
University of California, Los Angeles

A look at the history of the development of the concept of policy analysis may be useful in this context. Years ago, when I was learning to be a scientist, it was bad taste to talk about applications or the real world. In the field of psychology, it became clear that there was an inverse relationship between the prestige or status of the professors and the extent of their involvement with the real world. A study published a number of years ago in the *American Psychologist* showed a strong inverse relationship between the judged quality of research done in the field and the extent to which the research was judged to be applied or have relevance to the real world. If the phenomena of the study could be understood by a layman and if it seemed to have practical applications, the study tended to be regarded as less intellectual or less "scientific" and therefore to be of lower quality.

However, as we consider the current policy analysis fad, the tables have somehow been turned. Academe is under the gun. Academics, scholars, and researchers are being told (not by each other, which is a key point here, but by observers who live outside the ivory tower) that they had better shape up and get with it or they are not going to get any money. Since academics can be bought, just like everybody else, this development has created a whole new discipline of people who call themselves "policy analysts" or "policy researchers." To paraphrase Lee Cronbach's definition of intelligence, my definition of a "policy analyst" is "somebody who calls himself a policy analyst." In any case, my impression is that many of these individuals are entrepreneurs rather than scientists.

We have to recognize that these recent developments are probably part of a whole complex of phenomena resulting from a kind of national "put-down" of higher education. Partially, this negative reaction occurred because of the campus unrest movement. Colleges were caught in the middle. On one hand, they were accused by some of being repressive or even fascist in the way they dealt with students and with society. On the other hand, they were

perceived to be irresponsible and ineffective in coping with the many cases of disruption that occurred. Higher education was thus a double loser in terms of public opinion. We didn't please anybody from either the left or the right. As a net result, higher education has become hypersensitive and highly vulnerable to demands and pressures made upon it by outside groups, and I am speaking primarily here of those people who write the checks. As a consequence, we are now being told that we have to do policy research, to be held accountable, and that evaluation studies are more important than any other kind of studies. The foundations and governments don't want to fund basic research anymore. They want to fund action programs. This brings us then to my topic—the role of the professor-policy analyst and some of the dilemmas this professor faces.

A professor may feature himself either as (1) a policy analyst, or (2) one who responds to requests to do policy studies. (I put myself in the latter category.) These are really two basically different roles. Some professors play both roles, some play one, some play neither.

The first one I call the consultant, or adviser role. This kind of policy analyst typically offers professional advice, to anybody who will pay, by being responsive to requests for guidance, expert opinion, or reviews of research. Many economists had been doing this for years before there was any talk about "policy analysis." Economists have traditionally been successful in this role because they have better analytic tools. They also have another thing going for them: their knowledge of and interest in money. Money is both an independent and dependent variable for the economist. People in a position to make policy are thus inclined to ask the economist questions, simply because such people are usually concerned in one way or another about money. We are years away from having a President's Council of Social Advisors. You may laugh, and this shows how far we are from having it. We should note that some sociologists and psychologists are getting on the bandwagon and introducing money into their analysis, as an independent or dependent variable.

So far I have considered only a consultant role. The other role is the scholar's. Of course, I favor combining both roles—in those who do original research which is directed toward policy questions.

In higher education there is an enormously difficult conceptual problem in doing what I would call policy research in the field. And it works something like this. The way higher education is studied and analyzed (and indeed the way it is organized) creates a gap, an enormous gap, between, on the one hand, what we call planning, administration, and decision making and, on the other hand, the educational process (what happens to students). These two ongoing processes are studied almost independently. Indeed, you can read the Carnegie Commission's work on administration, decision making, and financing, and you find that they are looking only at the independent variable side of the equation. This is a self-contained enterprise and can be studied independently of the educational process. Completely omitted is information on the development of the student, the educational impact, or the question of "value-added," to use the economists' terms. Unfortunately,

we do not yet have the methodological and conceptual tools to bridge this enormous gap. And very few people seem to be interested in working on it. We may have one group studying students, and another independent group studying decision making and organizational theory. They do not seem to want to communicate. They do not seem to want to get together. Until they do or until someone brings them together, we will continue to have this problem of making critical decisions concerning costs without any knowledge of likely benefits.

Even though many of us are aware of the concept of cost-benefit analysis, in the implementation of the cost studies the benefits issue tends to get lost. A case in point is the National Commission on the Financing of Post-secondary Education, which as a matter of policy decided not to deal with benefits even before they got started. If they were going to finish the report by the due date, they felt they had to limit their work in this way. So the question remains: Are we ever going to try to bridge the gap?

Another problem comes from our inability to recognize that much of our so-called policy research is anything more than applied studies directed toward some immediate policy question. Take all of the research on campus unrest. Many scholars did not realize that campus unrest had tremendous potential implications for the question of governance. Thus, by student unrest we can, in theory at least, learn a lot about the relationship between governance and the development of students, and about the interaction and the participation of students in governance—in the way things get decided. Unrest is also related to the problem of how institutions change themselves. What are the factors that could possibly bring about change at an institution? What are the factors that impede change? In short, studies of transient phenomena in higher education have the potential for helping us understand aspects of the system which have much longer-term significance.

How does a social scientist study ongoing conflict situations that have enormous political implications? And without losing his head in the process? This is the general problem of the social scientist studying a highly charged social phenomenon. Because of the political nature of the problem, we fail to realize its more general theoretical implications. Clearly, the professor who tries to do policy research is caught in a dilemma. I, for one, don't see any way out of the dilemma and maybe the moral of the story is that one should not do policy research.

In conducting such research (and I am speaking very personally here) I have had experiences that make me very pessimistic about the future of this area. On the one hand, the scholar wants to maintain his or her scientific integrity. This is fundamental. On the other hand, you get dragged into the position of being an advocate, and there is no way around this problem. For example, you are *not* approached to testify in a court proceeding as an expert witness by some neutral source who says, "We want to know what you know about this problem." Whoever invites you usually has an axe to grind. One does not respond to such an invitation without, in effect,

becoming an advocate of one side or another. It becomes very difficult. The same is true for consulting. One does not normally hire a consultant who is going to give advice that one does not want. However, a third and, I think, the biggest problem of all is that we do not have any rules in social science for evaluating evidence. As a result, if you do junky research and the results fit the preconceived policy position of a particular person, the results will be accepted uncritically. On the other hand, even if you do an exquisitely well-designed and well-controlled study, it will nevertheless have *some* defects simply because it is social science. Anyone who is displeased with the policy implications of the findings can simply point out the methodological frailties and reject the whole thing.

Consider as an example the question of sampling. Social science research projects almost never satisfy the classical requirements of random sampling from a defined population. It is virtually impossible in research with human beings. Someone can simply dismiss any given study with a sophisticated technical attack on the sampling procedures. What we lack is a kind of court of review—some neutral, or at least relatively neutral, expert body which will evaluate the policy implications of research done by others and arrive at conclusions that have the least likelihood of being wrong. Basically, in social science we are trying to reduce our chances of making erroneous inferences by better and better observations and explanatory theories. It is not a matter of merely deciding, "Is it valid or invalid?" It is a matter of determining what are the most likely conclusions that run the least risk of error. Presently, we have no way of obtaining such analytic reviews. Thus, poor studies can be accepted uncritically and well-done studies can be dismissed out of hand, and there is no court of appeal. Unlike the hard sciences, we do not have generally accepted rules of evidence because of the completely observational nature of what we study and its great complexity. Those who claim to be interested in policy research ought to be giving some thought to this problem.

For starters, I would propose that people in schools of education, and especially higher education, seek out colleagues in the disciplines—aggressively seek them out—who are not interested in higher education. They may be in the field of learning, instruction, history, philosophy, or whatever. Seek them out, invite them to participate in our deliberations and in our research. Get their critical appraisal of our work. Try to involve them in it. We must be thick-skinned and ready for rejection, conflict, and a lot of competition. This is the only way that those of us in the discipline of higher education, or at least in the discipline of higher education research, will be able to deal adequately with the challenges of policy research and with the more basic question of whether our results will ever be believed.

THE PROFESSOR-EDITOR

Robert J. Silverman
The Ohio State University

The portrait that I am about to paint will suggest that the professor-editor deals with professional dilemmas and issues which I believe are awesome in their import and significant in their impact on the future of this field—in its pragmatic and conceptual parameters. They are responsibilities which one feels, at times, might better be relegated to a committee, if only to avoid the burden, but which at other times are embraced in the way an architect—as an integrator—experiences joy in attempting to creatively synthesize resources into a new edifice. For the professor, an editorship is certainly one of the few professional opportunities for a recurring high visibility of goal attainment (or lack thereof) and high accountability. One cannot hide, as in the case of the *Journal of Higher Education*, from 6,000 subscribers and over 500 potential *Journal* authors each year.

I am pleased to have an opportunity to address the notion of a knowledge base in the field from the perspective of the professor-editor. It is a focus which, quite frankly, concerns me deeply, and one which occupies many of my hours. And, it is especially a privilege to speak with you about questions concerning publication, issues which should be addressed openly, but which often seem to have a mysterious cloak about them. But, before raising those questions about publication in our field, let me refer briefly to the roles of journals in the established fields of study.

The Roles of Journals

If one were to review the functions of journals in various areas of study, it could be established, I believe, that journals in many disciplines have and continue to play crucial roles in the furtherance of the knowledge base, the maintenance and enforcement of the norms and values of the scholarly community, and the advancement of individual members of the community. Further, they provide "models" and set directions whose implications will be felt in the years ahead, though one could argue that the opportunities for

leadership and the kinds and degrees of editorial choice are dependent on the degree of focus of the collegial associations, and the activities to which individual journals might relate.

And, of course, professional associations, through their publications committees, set policy whose implications relate to the choice of editorial personnel, and indirectly, to the criteria which will be used in the manuscript selection process. The American Sociological Association, for example, in order to avoid intellectual partisanship, allows no more than one member of the Editorial Board for its prime official publication to have a terminal degree from the same graduate school. And when there are attempts to change the direction of a field, one of the targets of the partisans is to try to become represented "on the journal" and/or establish a journal through which the new perspective can become known. As an aside, it is interesting to speculate how recently-trimmed library budgets might influence the direction of various fields, as there are reviews of the utilization of current subscriptions and a freeze on new ones.

Unlike his colleagues in the more established fields of study, the professor-editor in higher education is a person, if not without a country, at least on the shores of an unexplored, rather primitive territory. Professor-editors, unlike other editorial personnel in "higher education," hold the field in trust. But, in trust for whom, and for what purposes? And, what criteria does one use to evaluate the stewardship?

The Issues—Some Examples

A number of months ago, in a meeting of the Editorial Board of the *Journal*, I suggested that included among the criteria for the evaluation of manuscripts should be the notion that they relate to and advance "higher education" as a field of study. Well, what is and what should higher education be as a field of study? What are the paradigms and what are the parameters of the field? How should our area relate to the social and behavioral sciences? What should be the relationship between the cognitive and the operational, and between the cognitive and the affective? Who should be the referees of manuscripts and what explicit and implicit norms and criteria should they oversee which will advance the field, whatever it is? What are the appropriate approaches to the communication of material to colleagues—a heterogeneous lot? Assuming with Corwin that "claims to knowledge are restricted to communicable and public constructions of reality within systems of widely shared and accepted thought processes and evidence . . .," how should one deal with the different backgrounds, expertise, interests, levels of sophistication among both potential authors and readers. Such differences suggest not only specific interests in different materials but mutually exclusive uses to which they might be put.

Now editors do, and I have recently developed, with my Board, a new official goal statement which provides some direction for the future. We want manuscripts which, in the spirit of an applied professional field, integrate

the pragmatic professional and the conceptual, manuscripts which evince solid scholarship, which are in full awareness of higher education as a social institution—its reality, its future, its literature. We want manuscripts written for readers who can put the material to different uses—to increase understanding, to raise or develop research or policy questions, more narrow application, etc.

Of course, the articles which my Board and I review are critiqued on operational criteria, and the accepted papers do, in fact, help define the field as a field of study.

But—there are questions.

How deep the theoretical grounding, and by what processes are the appropriate new theories generated? How sophisticated the methodology? How detailed the knowledge and use of the current literature on the topic area? Or should these even be among the criteria? If so, are the needs of the referees in assessing the papers different from those of the readers? One can take a perspective on the future development of the field as I have with regard to an organizational development approach which, if it does not undermine the significance of many traditional criteria, modifies them considerably and suggests new ones. These include those which speak, for instance, to health and renewal in the system through a focus on dimensions within the control of academic and nonacademic administrative personnel, as well as to more highly specified types of research—organic research, if you will.

What should be the sources of authors? Should manuscripts be commissioned, thus allowing an editor the opportunity to explicitly set direction? Or should manuscripts be solicited from the field, in an attempt to develop a sense of ownership and commitment among colleagues, and to help them improve the quality of their work on manuscripts, both accepted and rejected? This would be a slow process, but developmentally valid. If one accepts the premise that "higher education" is a concatenated field, that is, one which uses the theories and findings emanating from a variety of disciplines to applied problems, even ignoring the validity of this practice, should one favor methodologically and theoretically superior papers from faculty in the social and behavioral sciences? Or should one publish more work of "higher educationists" though the manuscripts from each camp would have different sources of strength and limitations? What should be our expectations of scholars in other fields who cannot be expected to know the higher education literature in the detail one would expect from a higher education professor?

These questions, both broad and specific in relation to the criteria to be used in assessing papers, neglect a significant area of concern, one which speaks more directly to the norms and values of our field as evidenced in the collegial relationships. For the purpose of these remarks, let me simply refer to the editor/professor-author relationship.

What are and what should be the expectations that we hold for each other? Should editors expect that articles submitted to their journals not be under concurrent consideration elsewhere, as is the normative rule among faculty in other fields? Of course, higher education is a developing area of study, with journals that have uncertain relationships to it, and the manuscripts focusing on topical areas have short-run import and half lives. Should data or ideas published in one journal in our field find their way to other publications with the same basic readerships? This is certainly attempted in all fields, but some of my experiences and I am sure your reading suggest we are not immune; at times I think our field rewards those who are so engaged. Actually, however, one might be able to develop the argument that there is a need for redundancy in an applied field in which authors who use a rational-empirical change model, if only implied, want to have an impact.

What about editors? Should they help authors improve the quality of their work by providing extensive feedback to them? If so, how explicit should we be? What base should we assume must exist before our efforts are likely to be wasted vis-a-vis manuscript improvement? If the medium's needs and the authors' approaches are at odds, in a developing field, should the editors provide the model? If so, what should it be?

I raise these questions as but a few of the very many issues and dilemmas which a professor-editor confronts. An editor with more narrowly defined publishing goals, whether they relate to the interests of a voluntary association, or a curriculum type, or a certain perspective, has different issues to consider. An editor who is primarily a faculty member must attend to the development of the base upon which the medium is founded, realizing that his or her professional socialization may be getting in the way.

Some Survey Data

As many of you who completed a survey I recently conducted know, I am interested in the publication process as a professor, as well as an editor. Focusing on three different samples, members of APHE and AAHE and editors of journals in higher education, I raised questions relating to the desirable rationales for publication; actual criteria used in the selection of publication outlets; favored criteria, in both process and content dimensions, for the selection of manuscripts; and the desired standards of the relationships between authors and editors. Means were established for each sample's responses to the list of alternatives included under each category; they were ranked and compared across samples.

I will discuss some of the data which might be of interest.

With regard to the standards of the relationships, members of APHE would agree, in order of ranking, that papers should not be used as a means to advertise an effort one is engaged in, that papers should be prepared with the guidelines of a journal in mind, and that the senior author of a paper should be the individual who contributes most to its development. There is much less agreement that articles should be submitted to one journal at a

time for review purposes and that data should be presented but once to the same readership. (There are some inconsistencies of meaning among these ratings.) Editors disagree with the professors on the latter two items by giving them a higher preference score.

With respect to the journal editors' relationship to authors, there is a high priority and agreement between editors and professors on the administrative aspects of the relationship—rapid review of papers and notification of their receipt. But there is less congruity and priority to the more telling aspects of the relationships. For instance, APHE members feel much more strongly than editors that their papers should have multiple reviews, that the review process should be blind, that critiques should go to the authors, that appeal procedures should be available, that reviewers should be known, and that publishing policies and criteria should be available.

In addition to questions relating to the relationships, we asked about the criteria to be used in evaluating papers. With regard to the process criteria, the data suggest, once again, higher rankings and agreement between professors and editors for the more bureaucratic and gross organizational dimensions, such factors as the conciseness and clarity of writing, validity of logic used, and appropriate use of statistics, if a research article. But editors have less concern than APHE members with regard to those elements of publishing which assume a more traditional scholarly dimension: emotional neutrality of author, theoretical grounding, review of literature and use of a bibliography, development of alternative interpretations of one's data. It should also be noted that the APHE scores associated with these elements are considerably lower than those for the bureaucratic dimensions, and have higher standard deviations.

Further, with regard to content criteria, editors, as opposed to APHE members, express greater concern for the interests of a journal's readers, the current timeliness of the topic, and the total organization of the paper. There is some congruity between the two samples with regard to an interest in papers which are oriented to practical problems; those which contribute to basic knowledge and to higher education as a field of study do not have very high rankings. There is a higher joint interest in policy-oriented, as opposed to theoretical, rhetorical, or descriptive case-study papers. Professors feel more strongly that papers ought to *anticipate* problems and issues in the field. Although I have not included data from the AAHE sample in these remarks, it is of interest that those in the latter sample are less interested than the professors that papers speak to practical problems and, in fact, more interested in those which focus on the development of higher education as a field of study.

Implications

A number of significant questions emerge from this brief discussion.

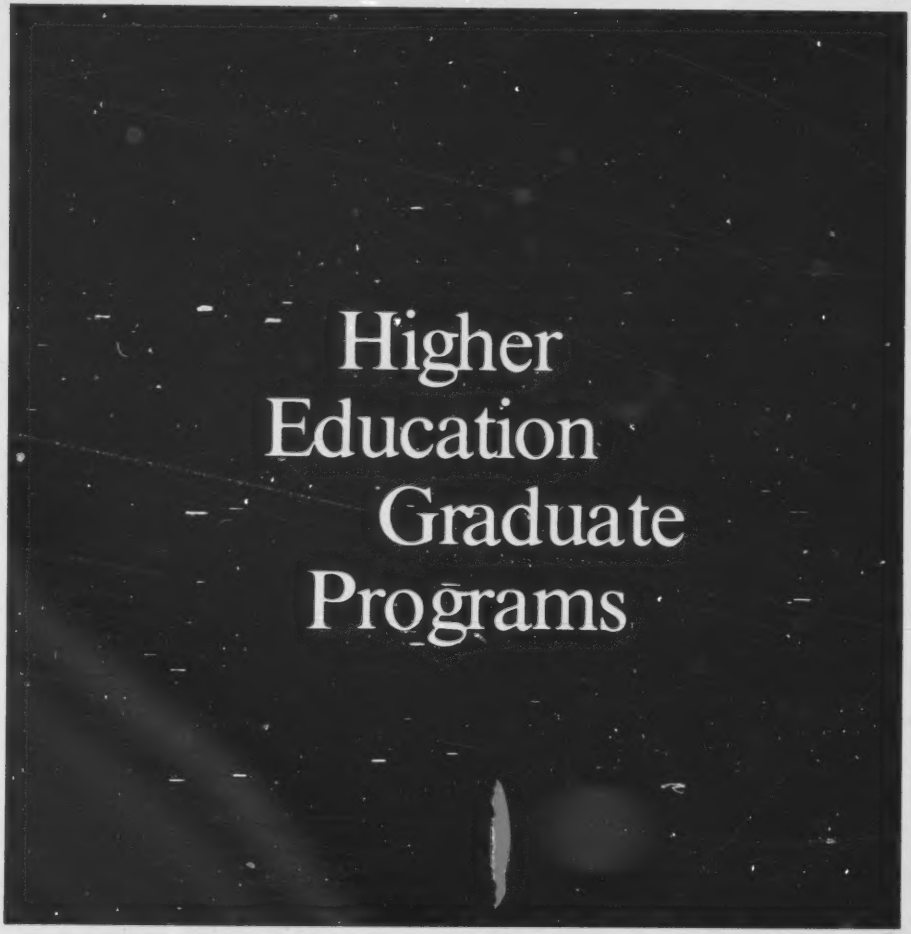
First, it is crucial that APHE provide opportunities for an in-depth consideration of the field as a field and play some new roles with respect to its development. On one level, these might include developing simulations for classroom use, or working with book publishers, to convince them of a book market so that our colleagues can more easily publish texts and scholarly books. On another level, we ought to consider a 2-day APHE annual meeting, featuring refereed papers, and regional meetings focusing on teaching in the field and the developmental field-based issues that are appropriate, given our state of growth.

My experiences and the survey data which I collected strongly suggest that we are like characters in a Pirandello play. We have no knowledge base and are uncertain about methods for its development and its communication. We do not have a core which, as important as its substantive implications, speaks to professional norms of behavior. I know of no lonelier professionals than younger professors of higher education. If an academician's development is a function of a rich environment comprised of intelligent and challenging students, a critical mass of accomplished, academically-oriented colleagues, and sympathetic administrators, then, outside of a few of our higher education centers, these faculty are at a distinct disadvantage.

Second, those responsible for communication in the field of higher education ought to convene to consider the broad publishing needs of the field and to discuss their relationship to them. Some publications may assume different or added functions; the need for new journals might be established. Such a process will make more visible a professional dimension to which many of us devote much of our time.

Third, we ought to consider whether the traditional form of scholarly publication is appropriate as a prime communication process in our field and whether other channels and approaches might not have greater value. Should institutional monographs be sponsored by and available from a national clearinghouse? Should we have a journal of abstracts of manuscripts available from authors, for copying costs?

There are of course as many other questions as there are people in this room. Allow me to suggest simply that the most important of these speaks to your interest in considering them in depth and acting on the collegial consensus that develops.



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SECTION II

SURVEY OF HIGHER EDUCATION PROGRAMS

Paul L. Dressel
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Objectives

Statements of goals, objectives, or purposes for higher education programs are perhaps somewhat more carefully thought out than those of other departments in a university. This cautious statement is highly subjective judgment, but it is supported by an extensive experience in studying program objectives. One might reasonably expect some care and sophistication in statements of objectives for a higher education program since clarity or lack of clarity in purposes, goals, and educational objectives is one of the most prevalent concerns, yet one of the most obvious deficiencies in universities and their colleges, schools, and departments. Nevertheless, there is no consistency in the point of view adopted by higher education faculties in developing and presenting such statements. Faculty, departmental, and even institutional purposes are intermixed and confused with student learning objectives. Whereas carefully thought out statements of educational objectives to be achieved by degree candidates should be available both to the candidates and to faculty, these are too frequently inadequate, unclear, or entirely lacking. Florida State University accomplishes this by indicating that the degree recipients should "be able to work with people," have a "general knowledge of American higher education," "specialized knowledge of one area," "be able to do research," and be "qualified to teach in lower division courses." This composite statement is commendable, but it raises several questions. Is the ability to work with people an initial criterion for selection, an ability which the program proposes to develop, or simply the trite expression of an ideal? Considering the range of higher education courses offered, "general knowledge"

Based upon a forthcoming book, *Higher Education as a Field of Study*, by Paul L. Dressel and Lewis B. Mayhew, to be published by Jossey-Bass.

requires some explanation. Is this to be defined solely in terms of course requirements which expose the individual to that general knowledge, or in terms of facts, concepts, principles, and values characterizing higher education? The latter course is more fundamental than the former since it permits the direct assessment of general knowledge rather than rigid course prescriptions. Knowledge also involves a passive scholarly awareness rather than spirited involvement or action as is implied by an extract from another program statement (University of California, Berkeley): "Concern for prevalent social and educational problems, and a commitment to broadening the accessibility of higher education to all." The latter statement establishes program goals, but these obviously imply emphases, priorities, and objectives to be attained by degree candidates—notably in the affective domain.

Organization

The unit in which the higher education degree program is based is designated in several ways: program, division, section, department, area, center, institute, and so on. In some cases, parallel units exist on the same campus—one for research, another for instruction. Consultation and service may be provided by either or both. Pennsylvania State University, for example, has both a center and a department. So have the University of Toledo, New York University, University of Washington, and the University of California, Berkeley. None of these centers directly offers courses or degrees, although part or all of the center-associated faculty may be involved in graduate work and instruction through other units. Centers at the University of Virginia, University of Michigan, University of Oklahoma, and the University of Massachusetts appear from the literature to be primarily instructional units responsible for the degree programs. Institutes of higher education at the University of Florida and the University of Georgia apparently are responsible for instruction, research, and service. The terms "institute" and "center" are obviously used in universities with very different meanings.

Admission Requirements

Although concern was frequently expressed in regard to admissions requirements, we doubt that much of significance can be said about these requirements, because programs vary so widely in their purposes and in their clientele. A program which caters to experienced faculty members and administrators reasonably gives less attention to test scores than to available evidence of career success to date and to motivation for an advanced degree. A program designed to prepare researchers looks for different background and competency than one devoted to training of practitioners. The major purpose in the latter case, especially when mature persons are selected (although seldom so bluntly expressed), is that of upgrading individuals already employed. In one university, in which many of the degree recipients were of this latter type, the responses of degree recipients to a survey of opinions indicated a widespread belief that tests, qualifying examinations, and comprehensives were unreasonable, irrelevant, and a sheer waste of time interfering with concentration on more

important experiences such as internships and field experiences in practical aspects of administration and management. Admission requirements are not spelled out in detail in all cases and a committee review of the application supplemented perhaps by an interview appears to be more critical than any particular item of evidence.

Degrees

For the 67 programs for which data on the degrees offered were provided, we acquired the following information: 17 offer the PhD only, 15 offer the EdD only, and 35 offer both. The distinctions between the PhD and EdD are not entirely clear. Some programs are restricted to the EdD as the only doctorate offered in education; others use the EdD for candidates oriented to educational leadership, administration, or educational practice other than research. In substance, based on review of requirements, the basic distinction between the PhD and the EdD is between research and practitioner orientation. However, the EdD of one institution could be a PhD at another, and the distinction has little to do with institutional or program reputation. In 17 programs, only the PhD is granted, whether for a research or a practitioner orientation of the program. In the 36 programs wherein both degrees are available, the distinction between the two involves one or more of the following: foreign language(s) (or an approved substitute) required for the PhD but not for the EdD; a more extended residency requirement for the PhD; differences in the credits required in education and in a minor(s) or cognate(s) outside of education; field experience or internship for the EdD but not for the PhD; an applied or practical problem approach to the dissertation requirement for the EdD. In some universities in which the foreign language requirement has been discarded or made optional for the college, department, or committee, the distinction between the EdD and the PhD has disappeared and the latter has become the preferred (or the only) degree. In those programs (15) where only the EdD is available, this is usually the result of a tradition or policy that all education degrees are practitioner-oriented and that the PhD may be granted only for basic research in a substantive discipline. Several programs reported the hope or expectation that this restriction might be lifted. Others apparently have found that the EdD has achieved widespread acceptance in their area, and see no need to consider a change or the extension to the student of an option. Of the 67 programs, 23 provide a doctorate, a 2-year specialist or certificate program, and a master's degree; 7 offer both a doctorate and a 2-year program; 18 include a master's degree with the doctorate; and 18 provide a doctorate only. (One was unclear.)

In 38 programs, a master's degree in higher education or in a specialty classified under that field is available. The 1-year master's is predominant, but a 2-year advanced master's degree is reported by two universities, and a 2-year master's in college teaching was reported by one. The master's degree is deemed useful as a waystation for those needing to work before continuing with the doctorate, as a degree appropriate for community college teaching or administration, or possibly as an adequate terminal degree for work in admissions, residence halls, placement, and so on.

Two-year programs variously designated as Advanced Certificate, Educational Specialist, and Certificate of Advanced Study were reported. Adding to these the two advanced master's degrees, a total of 29 2-year programs (degrees or certificates) in higher education were reported by the 67 institutions.

The variety in degree designation is of no great significance, although one might wish for more consistency. It is perhaps of more significance that of 39 responses commenting on the desirability of a master's degree in higher education, the no's (25) were more than double the yes's (12). Several respondents suggested that the master's might be discarded; several reported that it was used only as an out for those not able to complete the doctorate.

Emphases or Specialties

Although one of the recurring criticisms of higher education both at the graduate and undergraduate levels is that its character and its operations (especially from the viewpoint and experience of the student) have been excessively fragmented, there is a not surprising tendency to delineate a gradually increasing number of specialties. Both students and faculty seek for some unique identification which enhances their stature, increases employability, provides some sense of focus and unity, or permits a rational selection from an overly diverse array of courses, seminars, problems, and experiences with no apparent logic in interrelationship or sequence. Such specialization is surely not intrinsically bad, but the interaction and reinforcement of specialization and curricular proliferation can become both confusing and costly. Higher education programs are not immune to these tendencies.

In some institutions offering programs in higher education, adult education, student personnel work, evaluation, and educational technology were included as subspecialties within the broad field. In others, these were grouped with other educational programs or occasionally listed as fields separate from and parallel to higher education. Some specialties seem to us to be unduly restricted: minority affairs, curriculum, curriculum and change, philosophy, and middle management. Moreover, it is not always possible to determine what experience justifies designation as a specialty or concentration. Two or three courses, some individual readings, and perhaps a possible dissertation focus are likely to identify the significance in most cases.

We found several institutions in which programs leading to teacher preparation for elementary and secondary education were included in the higher education program. These programs serve the needs of those seeking a position, either in colleges of education or in departments, which involve responsibility for special methods courses and possibly direction or supervision of student teaching. Such specialties in many universities are labeled as Art Education, Business Education, English Education, Mathematics Education, Music Education, Physical Education, Science

Education, Social Studies Education, Agricultural Education, and Home Economics Education. In most universities, these specialty degrees are designated as EdDs or, occasionally, as PhDs in *discipline* and *education*. Since the ultimate emphasis in these programs is at the lower levels of education and the courses taken are normally quite different from those taken by students oriented to other specialties in higher education, the inclusion of the teacher education specialty in higher education is of dubious merit.

However, specialties recurring with reasonable frequency (based on 55 programs) are less than 10 in number. They include academic administration (offered in 48 programs); student personnel administration (offered in 38 programs); community college administration (offered in 31 programs); financial administration (offered in 21 programs); institutional research (offered in 21 programs); research on higher education (offered in 20 programs), and planning in higher education (offered in 17 programs). Teaching (including college teaching, teaching of higher education, teaching in the community college, and a combination of instruction and curriculum) occurred as a specialty in 18 cases. In one form or another, curriculum appears 8 times and the college student 3 times.

We caution that the numbers attached to these specialties are no more than rough indicators of the tendency to recognize special interests. For the purpose of a dissertation, most doctoral candidates will narrow their research focus, and this may or may not be regarded by the candidate and his or her committee as identifying a specialty. We were told that students and their advisers often identify a specialty by a dissertation topic and a few related courses, even though it is not entered formally on the record.

Some specialties are underrepresented when tabulated from a higher education orientation. Student personnel programs for higher education, adult or continuing education, college counseling (this latter especially) are offered perhaps as often independent of higher education as they are as a part of it. Even the community college program is occasionally viewed as separate from higher education. On the other hand, several programs seem to be almost solely oriented to the community college. One, the University of Toledo, states a major commitment to liberal arts education.

Degree Requirements

Previous experience in attempting to summarize degree requirements indicates that characterization by reference to catalog (or other formal) specifications is risky. One reason is that catalog credit requirements are minimums; committees may and do require students to take additional courses because of perceived deficiencies or because the added courses are seen as especially relevant to the individual's goals. Candidates sometimes propose excess credits simply because they want certain courses (or professors) on their record, or perceive the courses as essential to their career. Many (perhaps most) graduate advisers (and committees) consider the entire graduate program of an individual (master's, specialist,

and doctorate) as the planning unit. This results in such marked variations in courses and credits in individual programs that the underlying principles and policies used in formulating a doctoral program are not apparent unless the total educational experience of each individual and the rationale for planning of that individual's program are consulted. Unfortunately, this rationale is not usually available. The program reflects the agreements reached but not the reasons for them. The basic elements include requirements in total hours or credits, a residence requirement, and a dissertation. In more specific terms, some combination of the following elements is usually required or recommended: core requirements in education, core requirements in higher education, requirements in research methodology, a specialty in higher education, practicum and/or internship, a minor within education, a minor or cognate outside of education, foreign language (or substitute), dissertation.

However, we found no program with formal requirements stated for each of these categories. Based solely on stated requirements the greatest variations appear in the existence and extent of each of the following requirements: *education* core requirements; *higher education* core requirements; internship requirements; research requirements, including dissertation; specialty requirements in higher education; foreign language requirements.

Core Requirements in Education

Some programs in higher education are constrained by the college of education requirements, which specify common or core requirements for all doctorates. These requirements are usually limited to so-called "foundation" courses such as educational psychology, educational philosophy, educational sociology, and history of education. A requirement in research methodology or in statistics is occasionally included in this grouping. The "foundations" designation frequently appears in course titles, for example, Philosophical Foundations of Education.

The core requirement in *education*—occasionally described as "general education"—is not unanimously approved. One gets the impression in some discussions that the total education faculty believes the integrity of the doctorate in education would be endangered by elimination of this core for any group. In contrast, the higher education faculty and the students may view the "general education" as wasted effort, especially when the core courses virtually ignore the nature and problems of higher education. Foundation courses in a higher education core seem much more appropriate to professors and students whose entire experience and interest have been in higher education. The authorization of a distinctive degree, PhD in Higher Education, seems in some cases to have been associated with a successful thrust for complete autonomy in setting the higher education degree requirements.

Higher Education Core Requirements

It was evident that core requirements tended to expand either in number or in the alternatives permitted as the range of courses and specialties available increased. If college student personnel work is included in higher education, the higher education core may include a course in that field. In several programs, especially but not solely, when the number of courses available was limited, no core requirement was stated. Core requirements are not always stated in official documents, but may appear in informal mimeographed recommendations or simply be informal agreements based on staff discussions. Occasionally, core requirements simply include the introductory course or a sampling of the several specialties (or professors) included in a program. This suggests that core requirements are occasionally political compromises rather than scholarly decisions. They may play a role not unlike that of undergraduate general education requirements in distributing the credit hours and offering each specialty an opportunity to attract the undecided student as well as providing an overview of the broad field of higher education.

Most of the higher education core requirements involve three to six courses with possibly some choice permitted, such as four out of an array of five courses, or one or two out of each of several groups of courses. A typical requirement may include Foundations (Nature, Issues) of Higher Education, Student Personnel Work, Community College, Administration. Courses in college teaching, curriculum, and history are also frequent elements of the core. One of the more extensive core requirements included the following: American College and University, History and Current Issues, Research on the College Student, Academic Program Organization and Administration, Research Seminar.

Conceptions of Specialization

The conception of specialization prevalent in a program depends upon the range of specialties covered. If adult education, community college education, and student personnel work are grouped with higher education, higher education may, itself, be viewed as a specialty.

The University of Southern California lists concentrations in adult education, the college student, community college, curriculum, fiscal affairs and governance, history and development, teaching, professional education, technical and industrial education, and the learning environment. In contrast, other programs list no specialties, although, as several respondents pointed out, students may identify a specialty for themselves by their selection of courses, readings, internship, and research.

The University of Florida states that the higher education candidate can major in any one of five departments. Florida State University succinctly provides a justification for the specialty in administration by stating that the degree recipient should be "flexible enough to take on a wide range of administrative tasks and yet have sufficient specialization to claim an area of competency."

Internships

Internships in any phase of higher education pose several problems. Many of those faculty members who profess some expertise in administrative theory or long observation of administrative practice have had little or no administrative experience. Many faculty members in higher education programs carry heavy instructional loads and do not engage in research—some never have. Heavy loads, too, may interfere with good teaching so that some of the higher education faculty do not provide good models of any of the careers for which they purport to train. Hence, internships in better and more realistic situations than the classroom are highly desirable. Internships with a researcher are probably the easiest to arrange. Research tends to operate outside of rigid time pressures and usually is less involved with tensions and human concerns than administrative decisions and instruction.

The internship is also related to the residence requirement. Indeed, the residency is in itself an internship based upon the conception that library, laboratories, courses, research experiences, and immersion in a culture for a significant period of time is required to produce a scholar. What once was true for the researcher is no longer true even for that role. Library, research facilities, and a research culture are found elsewhere than on a university campus. But overt preparation for administration, teaching, and service activities requires an integration of theory and practice which is attainable in the fullest sense only if abstract learning is related to reality. Traditional residence requirements (and some traditional objectives and requirements) may no longer be justified as requirements for *all* degree candidates. There is an anomaly in the fact that while an internship on the campus of the degree-granting institution may count as part of the residence requirement, elsewhere it usually does not.

Degree Candidates

The reports of current degree candidates yield the following approximate enrollments:

1. University of Pittsburgh	200
2. University of Florida	170
3. New York University	165
4. North Texas State University	
(in administration)	125
(in college teaching)	650
5. Michigan State University	125
6. George Washington University	101
7. Indiana University	100
8. Columbia University Teachers College	100
9. University of Michigan	90-100
10. University of California, Berkeley	75-110
11. University of Denver	80
12. SUNY-Buffalo	78
13. Florida State University	70
14. University of California, Los Angeles	70

For the many reasons already mentioned, we have some hesitation about indicating the total of higher education doctorates awarded to date or the number of candidates enrolled as of early 1973. However, totaling the various higher education degree recipients as given in our survey, we obtained 3,409 inclusive of both EdDs and PhDs. Recognizing that some respondents were unable to account for degree recipients prior to the early 1960s and that some programs have been missed, 3,500 to 3,600 is not an unreasonable estimate of degrees granted to date in higher education. How much these persons really have in common in their educational experiences is an unanswerable question. Higher education programs are, after all, of rather recent origin; they have been seeking an identity and are still in flux. As we have seen, vast differences are found among existing programs as to what specialties are included and what requirements are specified.

Degrees Awarded and Current Enrollments

Our survey requested information on degrees awarded and on the number of students currently enrolled. In both cases, the respondents were informed that reasonably close estimates would be satisfactory. Many of the responses indicated that exact counts were not available and that numerous difficulties and deficiencies were found in supplying even estimates. In some institutions no records of degree recipients prior to 10 or 15 years ago could be located. The distinction between a degree in education and one in higher education was sometimes uncertain. Formal recognition of the existence of a degree in higher education seems to date from 1960, or later, in most programs. Accordingly, many of the responses were indeed approximations. Furthermore, the definition of the degree varies so that numbers are not strictly comparable. The inclusion or exclusion of degrees oriented to community colleges, adult education, teacher education, college teaching, and student personnel can obviously make vast differences in either number of degrees awarded or candidates currently enrolled. The following universities have been particularly productive of degrees in higher education:

1. Indiana University	250
2. Michigan State University	228
3. University of California, Los Angeles	200+
4. University of Minnesota	190-200
5. New York University	172
6. Florida State University	150
7. University of Florida	150
8. University of Southern California	130
9. University of Michigan	129
10. University of California, Berkeley	125
11. Ohio State University	100
12. University of Pittsburgh	90
13. Columbia University Teachers College	since 1964 - 90

Current enrollment counts also present difficulties. Our total, based on the survey returns, is 4,078. It is striking that reported current enrollments exceed by over 600 the total higher education doctorates awarded to date.

We may well be on the verge of producing an oversupply, a fear expressed by some professors in interviews.

Higher Education Faculty

Our survey, focusing on those programs with a doctoral degree program in higher education, cannot accurately identify all those faculty members who may be regarded, or who may regard themselves, as teaching or researching on some aspect of higher education.

Our tabulation of faculty based on listings from 62 universities shows 213 full-time faculty members and 321 part-time, for a total of 534. Yet, even our minimal 534 estimate has in it elements of uncertainty. It includes some persons (how many we do not know) loosely affiliated with higher education who have never taught a course in higher education, never directed a doctoral candidate in higher education, and never executed a research study in the field. Usually, these persons hold some administrative appointment and have a courtesy title reflecting their desire for some academic rank designation. There are times when even a president or vice-president likes to identify with the professoriate.

The distribution of higher education faculty over the several ranks is of some interest. Of the full-time faculty reported in our statistics, 55 percent were professors, 25 percent associate professors, 16 percent assistant professors, and the remainder (4 percent) either lecturers or instructors. We find some surprise at the reported titles of "instructor of higher education" on several counts. In recent years the use of the title "instructor" for anyone with the doctorate has disappeared in most institutions, and the assignment of either instructors or junior faculty without the doctorate to teach at the graduate level is, at the least, a dubious practice. In another sense, the stature of a field designated as higher education hardly seems to be buttressed by extensive use of assistant professors and instructors which, in our data, account for over 20 percent of the higher education faculty.

The part-time faculty, heavily loaded with administrative personnel, rather surprisingly (to us, at least) show an almost identical distribution over the ranks: 58 percent professors, 20 percent associate professors, 19 percent assistant professors, and 3 percent instructors or lecturers.

In view of our comment about the use of junior ranking faculty in higher education programs, it is worthy of note that in 23 universities all the full-time higher education faculty carried the ranks of professor or associate professor. To these should be added 5 universities in which higher education is staffed only by part-time faculty and in which all of these persons are in the top two ranks. Thus, 22 of 55 programs are staffed by only professors and associate professors, although taken as a group, they are neither the largest nor the more prestigious programs.

The Department of Higher Education in one university lists 31 persons with academic titles in the department. The makeup of this group indicates one pattern of staffing which certainly adds luster to the department and creates acceptance and respectability in the rest of the university, but which (we suspect) tends to give a department a definitely practitioner tone. The large number of part-time persons could—and we heard this complaint several times—pose problems in departmental operation and possibly throw an overload of advising and detail on the relatively small number of full-time persons.

Positions Held by Graduates

Out of the 1,057 higher education degree recipients for whom initial and/or current positions were available, about 77 percent were in 4-year colleges and universities. Of the 77 percent, about 7 percent were listed under adult and continuing education. About 12 percent were in community colleges, about 1.5 percent in public schools. The remainder (about 6 percent) were employed in government, foundations, education associations, or business.

Thirty percent of the graduates were in teaching, counseling, or equivalent level college positions. The orientation of programs and students to administration is borne out by the 575 individuals reporting jobs as chairmen, directors, coordinators (122); registrars, librarians, business managers, institutional research (19); deans and public school administrators (278); presidential assistants (18); vice-presidents (59); and presidents or chancellors (79). In all, 64 percent of the graduates are in administration and 15 percent have titles as presidents or vice-presidents. Another 31 percent hold deanships. About 4 percent (40) were reported as having become professors of higher education. Although adequate bases for comparative judgment do not exist, the record of administrative placements is surely satisfactory, if that is the goal of programs and of students.

Although many degree recipients obtain administrative appointments as deans or presidential assistants immediately, only the unusually mature person is likely to attain a vice-presidency or presidency without several years of service following the receipt of the degree. Since most higher education programs are only 10-15 years old (or less) and tended to be quite small in number in their earlier years, the success of these programs in preparing administrators is doubly underlined.

Summary

Our survey demonstrates that higher education as a degree-granting program has reached significant dimensions in offerings, in specialties provided, in degrees available, in faculty, in degrees already awarded, and in current enrollments. There are marked variations in program definition and in goals, and there are numerous issues and quandaries reported within programs which become even more evident when viewed across programs.

There are programs which have clearly and explicitly delimited their purposes. Others have exhibited an expediency and an opportunism highly commendable in demonstrating a desire to meet identified needs, but which threaten to further diffuse programs which are already strained by attempts to accommodate preparation for researchers, teachers, counselors, student personnel administrators, academic and business administrators, and public service personnel in technical institutes, community colleges, liberal arts colleges, and universities. On one hand, the attempt to offer a wide range of courses highly specific to the needs of the heterogeneous clientele and, on the other, the failure thus far to involve faculty from the many other relevant departments in the university places an almost unreasonable burden upon the relatively small faculty associated with most higher education programs. Size relative to the chore means that "unreasonable burden" requires examination in two senses: first, in regard to the teaching, research, and service load which falls upon the faculty; and, second, in respect to the improbability that any small staff can encompass the range of talent and experience required to fulfill the task in a meritorious manner. It is not surprising that some faculty members voiced concern about the possibility of upholding standards in the face of the burden accepted. One professor, who reported 15 active current candidates, an indeterminate number in absentia working on dissertations, membership on 50 doctoral committees, a number of major committee responsibilities, several community and consultation projects related to his university role, stated quite candidly that he was unable to pursue any research of his own. Others echoed his concern. This does not augur well for the strength of higher education programs.

PROBLEMS AND ISSUES IN PROGRAMS IN HIGHER EDUCATION

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Stanford University

Although judgments are highly subjective, impressionistic, and by no means applicable to all programs, nonetheless they force us to enumerate a number of weaknesses in doctoral programs in higher education. The bases for these judgments are varied. Some reflect testimony of faculty in programs in higher education. Others represent our own judgments from observing programs and interviewing students and graduates. Still others stem from our own conception of the nature of graduate professional education.

Perhaps the most pervasive weakness is the problem of identity, visibility, or even respect, on the campus for the program in higher education. This difficulty is not discretely one of these programs, but is also shared by other new or marginal fields of study, such as graduate programs in international affairs, graduate ethnic studies programs, or interdisciplinary studies in policy analysis. But the problem does seem quite acute. First, there is no clear agreement as to the parameters of the study of higher education. Second, there is no generally understood preparation for expertise which an acknowledged professor of higher education should possess. This matter is illustrated by the example of Stanford which has the only named chair of higher education in the country. The search committee for a successor to the first incumbent, W. H. Cowley, passed over all of the individuals closely identified with the emerging study of higher education and selected instead a political scientist-sociologist, who had 5 years of collegiate administrative experience and who was just beginning a study of college presidents. Further, there appears to be little understanding, even within schools of education which have departments of higher education, of the careers for which the department prepares people. There are, of course, exceptions, as for example the quite large program at Southern Illinois University, which uses a large number of central administration officers as adjunct or part-time professors. Since those leaders are part of the program, they insure that there is general understanding (as well as adequate financial support) for the undertaking. A more general situation is one in which a department of some similar unit for higher education is designated, with one or two individuals assigned full time, to which gravitate persons who have been disappointed or grown old in administrative ranks or who

have been marginal professors in a disciplinary department and who find teaching about teaching an effective surrogate for disciplinary scholarship. Or departments also attract people who have found their original concerns in professional education no longer popular (e.g., agricultural education) and who convert their tenured selves into professors of higher education. Such heterogeneity of faculty runs so counter to the homogeneity of established academic departments or professional schools demanding a specific kind of training, that the department of higher education is virtually assured of marginal status.

A second weakness is the sheer size of some of the more visible and productive departments of higher education. Our impression is that many of these enroll far too many students, considering the relatively few full-time faculty members assigned to higher education, and that they have graduated far too many doctoral recipients. This judgment is made partly by comparing the productivity of large graduate departments in arts and sciences, and partly out of our own conviction as to the amount of time and attention which is necessary to prepare a PhD fully. The scenario which we believe is typical is for students to matriculate in programs of higher education and to attend courses on a part-time basis until entitled to a sabbatical leave from the institution in which they hold appointments. During the sabbatical leave period they satisfy residency requirements and begin the lonely quest for an appropriate thesis topic. Discovery of that coincides with the end of their sabbatical and they return to their home institutions with the intention of developing their projects evenings and on weekends. They may from time to time return to the university campus for brief consultations with their advisers, although these more frequently than not consist of reporting on progress rather than working together to solve difficult methodological problems. Within such a scenario, of course, there are vexations and barriers to student progress. There are preliminary or qualifying examinations to be overcome; students do encounter obstacles to finding and stating clearly a dissertation topic. But generally, because of numbers of advisees, these part-time candidates can and do flow through the system with minimum critique or assistance from their advisers. If this scenario is close to reality, it opens the way for clear abuse with no procedural devices available to prevent the abuse. Thus one "all but dissertation" candidate at one of the more visible programs, applying all of the procedures of his university, created a doctoral degree-granting institution which was a caricature, or better, a travesty on graduate work in higher education. The institution he created required candidates to possess an earned master's degree and to have had at least 3 years of educational work experience. Once admitted, candidates spent 5 weeks the following summer taking courses and developing a dissertation topic. The following year they spent on their own job and, working with a thesis director of their own choosing, finished their thesis. The following summer they spent 2 more weeks on campus taking courses, standing for their oral examinations and receiving their PhD degree in higher education. With such an arrangement, a small cadre of three full-time administrative officers, a small part-time summer school faculty, and some poorly remunerated part-time thesis directors could handle 85 doctoral candidates the first year, anticipating an average of 250 a year after the institution was in full

operation. We are not contending that established programs have reached or are even approaching such a caricature, but we do suggest that excessively large enrollments and excessively large numbers of degrees awarded suggest tendencies in the direction of caricature. Thus, we find it appalling rather than praiseworthy when a single thesis director produces eight doctorates in 1 year.

A third weakness is advanced quite tenuously because of the lack of any clearly established relationship between teaching and research. However the rationale and the mythology of the American PhD degree is that it is a research degree preparing students to do research in their chosen field. Much of their program is intended to develop research competencies and this logically presupposes research competency of those directing their work. Yet we find that relatively few professors in programs in higher education can be judged producing scholars or researchers. It is true that full-time professors are quite busy with contracts, surveys, and consulting work, and that they do spend substantial amounts of time talking about research in higher education. Yet, the volume of published information outside of that released through house organs or newsletters appears quite limited. Now a rationale can be advanced for this situation, assuming it to be reasonably typical. The department head of one large program consisting of seven full-time equivalent faculty members and well over a hundred students conceded that his faculty did not include any publishing scholars. However, he believed that his faculty was using the results of scholarship developed elsewhere and were providing advanced education for leaders in a region dreadfully deficient in highly trained educational leadership. He argued that for his region it was better that the state's resources be used for that kind of a program rather than for a program in which faculty members were preoccupied with their own research and scholarship. Students in that program, however, saw things differently. They were reasonably pleased with their courses and with the internship experiences they were receiving, but they were almost poignant in expressing a desire that there could be at least a leavening of actively producing scholars. In a sense this situation might be a transitory one. Formal programs in higher education are products of the 1960s, and the parameters of the field are still being established. Here higher education as a separate field may be following in the footsteps of other sciences and fields of scholarship.

A related weakness which also may be simply the product of the developmental period of a field of study is a possible over-elaboration of courses in the light of existing knowledge and theory. In the voluminous literature concerning higher education there is such enormous redundancy that we are forced to the conclusion that existing scholarship cannot really support more than a handful of courses. Probably there is enough scholarship to support an historical course, a course dealing with types of institutions, a course dealing with descriptions and ad hoc critiques of governance and organizations, a course dealing with the full range of personnel services, including evaluation, and possibly a course dealing with contemporary college students (but much of this material is dated and restricted to the atypical student dissent of the 1960s). Courses beyond

those few seem generally to be idiosyncratic variations on those themes, or eclectic montages with elements drawn from those few reasonably rich domains. This forces the conclusion that the needed and supportable courses focusing directly on the phenomenon of higher education could be taught by a relatively few faculty members, and that to extend the number of courses is to repeat the proliferation of relatively soft courses in professional education, which took place during the 1930s, 40s, and 50s, and which brought down on the heads of professional educators a storm of criticism such as that leveled by Arthur Bester, James G. Conant, or James Koerner. These comments do not imply support for the similar proliferation of courses which took place throughout the university during the latter portions of the twentieth century. However, for a few of these fields, the new knowledge base was indeed expanding sufficiently to support course proliferation. The weakness in the field of higher education is that program expansion and course proliferation have developed much more rapidly than has the knowledge or theory base. Again, this may be transitory. Out of new courses lacking an appropriate scholarly base may come the questions which will stimulate inquiry which will lead to an expansion of knowledge. For that to happen, however, the faculties and their students will need to reorient their efforts into a more distinctively research and scholarship posture.

These weaknesses are related to several contributing phenomena, the first of which is the somewhat idiosyncratic emphases given a specific program by the individual who first developed the field. For almost a quarter century, W. H. Cowley maintained a program in higher education at Stanford which reflected his own interests in the specific taxonomic mode of analysis of higher education, and a highly personalized retrieval system to classify knowledge about higher education. Similarly, at Teachers College, Earl G. McGrath's interest in liberal and general education gave a distinctive flavor to the Institute for Higher Education so long as he remained there. In both situations the programs produced a number of capable individuals, but the intellectual base was so personalized that a sustaining intellectual base was never established to ensure the continuity of the scholarly orientation of the program. When those incumbents left, the programs were reoriented to conform to the interests of new incumbents. Now clearly, the interests of individual scholars and department heads properly should give some direction to ongoing work, but in the more established fields there is a solid base which ensures that a history or biology or mathematics department will be, with respect to important dimensions, the same regardless of the individual faculty members working in the field. Another contributing factor is the quite casual way some institutions have entered the field of higher education, without specific knowledge of what was entailed and by making appointments of individuals unacquainted with even the limited mass of scholarships. Faculties have been expanded equally casually. Thus in one program the former dean of students, a former community college president, and a former director of adult education were added to a faculty and expected to begin immediately to direct doctoral level thesis research. Their previous administrative experience had been typical and their performance judged more than creditable, but nothing in their professional backgrounds since completing their own theses qualified them for what is

presumed to be one of the most important activities of a graduate professor, that is, supervision of graduate student research. All of these factors tend to give a number of programs in higher education a distinctly amateur quality and a feeling of temporariness. The program exists, it has students, its graduates get jobs, but one doesn't know what the program will look like after professor X dies, resigns, or retires. And the courses frequently manifest an anecdotal flavor. Former administrators have had many experiences of interest to aspiring administrators, and these come to make up much of course work not already consumed by part-time students showing and telling of their own ongoing administrative problems and experiences.

A significant different kind of weakness is the less than adequate quantitative preparation provided by programs in higher education, especially in view of the significance of quantification, which many researchable problems require. A few programs require a single course in statistics, but this is likely to be more a descriptive course than one designed to develop competencies. Thus students learn to define median, mode, standard deviation, and similar terms, and perhaps learn to compute simple biserial correlations, but it is clearly inadequate preparation for any kind of experimental thesis and is equally inadequate for a thesis dealing with governance based upon model building and simulation. It is, of course, difficult, if not impossible to document, but the impression persists that students attracted to professional education, whether it be preparation for teaching or general school administration or for higher education, have been underprepared in mathematics as compared to those students attracted into the arts and sciences. At one time, a program which did not stress quantification could still be reasonably effective, as long as actual administrative practice did not require quantification. However, increasingly it becomes apparent that management and administration will require competencies in quantification just as research and scholarship do now, even in the traditionally soft social sciences and the humanities. Very likely this weakness cannot be readily corrected with typical applicants for graduate training in higher education, who have had no more than 2 or possibly 3 years of high school mathematics. However, if one of the reforms suggested by the Carnegie Commission on Higher Education transpires, that condition may change. The Commission urges that all high schools require a full 4 years of mathematics. With such a base, even if a student did not take mathematics or the equally important computer science as an undergraduate, remedial courses could be offered by graduate programs in higher education, which would lower the level of student terror and provide them reasonably good chances for completing more work in quantification in their doctoral programs. In justification of the existing situation, professors will often argue that there is really no need for people preparing some kinds of dissertations, such as case studies, to have a mathematical or statistical background. Yet a review of recently completed doctoral theses revealed that most subjects undertaken should have required reasonable statistical sophistication.

A weakness which has already been alluded to but which requires more elaboration is the tendency for many programs to enroll disproportionately

high numbers of part-time students. Part-time enrollments are clearly a means of upgrading educational workers, particularly for credentialing purposes, and part-time attendance is clearly the easiest way for graduate students to support themselves financially. But one can raise the question as to whether or not part-time graduate work can provide the deep immersion which seemingly is required to prepare scholars in the sciences and humanities, and to prepare people for the older professions. The apparently reasonably successful efforts of graduate departments in the sciences to prepare future scientists have been through the deep immersion of graduate students as full-time students in course work, research assistant experience, and even on to a year or 2 years as postdoctoral students. Law schools and medical schools have produced distinctive modes of thought in their students largely through deep immersion. The first year of law school tightly prescribed develops in students the capacity to think like lawyers and to think of themselves as lawyers. The very full 4 years of medical school seem to do the same thing. It is doubtful that part-time involvement in programs of higher education can accomplish such a scholarly or professional socialization, and if it does not, it is equally doubtful that programs in higher education will ever come to be regarded as the principal sources, either for high level administrative leadership or for scholarship. The data, of course, are not yet available. Yet, the hypothesis can be advanced that programs which cater to part-time students will generally upgrade the credentialed level of the positions those part-time students occupied while candidates for a degree; but those graduates will not accede to higher-level administrative posts at rates different from ascension provided by the older informal preparation of the institutional committee system and temporary administrative appointments. Nor does it seem likely that part-time students will become the professors of higher education of the future.

This next weakness is even more impressionistic than some of the previous comments. It is based on talking with students in a half-dozen of the larger programs, on examining course syllabi, and on inference from samples of qualifying or preliminary examination questions. The impression persists that many of the courses offered in programs of higher education are descriptive and frequently of the current-issues sort. Thus a course on the community college describes the history and argues the significance of, and then discusses a number of current issues facing, junior college education. Courses on administration discuss the historic role of boards of trustees, enumerate the responsibilities of presidents, deans and the like, describe the evolution of the concept of shared responsibility, and then list the current issues facing academic governance. Except for courses on the history of higher education which adopt a chronological framework, courses rarely present a consistent framework or a consistent set of theoretical presuppositions. In part, this reflects the descriptive quality of much of the literature available for courses in higher education, and also the fact that higher education is such a young field of study that the basic descriptive data has yet fully to be collected. Thus, courses seem to be primarily transmission vehicles to channel the growing amount of descriptive information into the minds and notebooks of graduate students. Perhaps indicative of the current events emphasis is the enormous

popularity of the *Chronicle of Higher Education*, the newspaper devoted to disseminating information of a current nature. Our experience from talking with graduate students across the country indicates that this publication is a primary shaper of their opinions as to what is and is not of significance.

In addition to these weaknesses of at least some ongoing programs, there are some marked deficiencies, assuming that most of the programs are essentially preparing people to enter administrative posts. The fact of these deficiencies is explainable because the nature of administration and management has been changing rapidly, leaving a substantial lag between programs in administration and actual practice. Graduate schools of business were perhaps the first to sense the lag, and in schools such as Harvard or Stanford, curricula have been sharply modified, particularly in the direction of greater quantification. It is in this general direction that the first deficiency in programs in higher education is to be found. While catalogs will reasonably frequently list courses on the finance of higher education, and occasionally courses dealing with uses of the computer and with decision making, these courses are in a distinct minority, when compared with the more descriptive historical or current-issues sorts of courses. A somewhat larger number of programs at least imply a requirement or a desirability for statistics. However, the impression persists that these are statistics courses more appropriate for experimental psychology or sociological survey research than for decision making.

In a related way, programs seem to ignore or assign relatively modest attention to preparation for long-range planning, especially planning which requires quantification, simulation, and statistical inference. Once again this is not a deliberate error on the part of those responsible for programs in higher education. Rather it reflects the recent and still quite primitive state of educational planning. As of 1968, relatively few of the 156 complex universities surveyed as to plans for graduate and professional education through 1980, had plans extending beyond the next year's budget. The National Association of Planners, called the Society for College and University Planning, has been struggling to delineate the parameters of planning, and is almost in a continuous state of identity crisis because there is so little agreement as to what kinds of people are actually involved in planning and how might they be prepared. Within institutions themselves there is little agreement as to the tactics and strategies for planning; at one institution the planning office is located outside of the central line of decision making, and in another it is so close to decision-making apparatus as almost to be indistinguishable from the office of the provost. Nonetheless the significance of planning increases each year in the agenda of administrative and managerial duties, and programs preparing people for those roles might be expected to develop, adapt, or borrow courses which could develop needed competencies.

A third emerging concern that seems to have received relatively little curricular emphasis is the relationship of higher education and the law. For long the courts adopted a rather cautious posture with respect to the internal functionings of collegiate education. Public institutions did, of course, have to cope with legislated and administrative law, but at a

relatively routine level. On campuses the affairs of people were governed more by broad principle or value statements than by written constitutions, by-laws, and procedures ensuring due process. All of that, of course, has been changed. Relationships between collegiate institutions and their students, staffs, and faculties have been increasingly delineated by courts and legislation. On the campus, relationships have also been structured by constitutions, by-laws, formal judicial systems, and mechanisms to guarantee procedural rights, and the relationships between both public and private institutions with state and federal government are increasingly governed by administrative or legislated law. The higher education amendments of 1972 requiring a state official to distribute federal funds is simply illustrative. Such developments would seem to require in-depth exposure of future administrative officers to legal questions, concerns, and approaches in a much broader and more sophisticated way than the earlier courses on school law required for administrative credentialing of school principals and school superintendents. Yet for the most part such courses are not listed, nor are relationships between a school of education and a school of law particularly close.

A related deficiency concerns unionism, collective bargaining, and negotiated contracts. The deficiency is underscored by the plea of a former Stanford graduate who found himself, 6 weeks after assuming a new post as academic vice president, in the midst of contract negotiations with absolutely no preparation for coping with the tangled issues deriving from unionism. While it is impossible to tell how widespread collective bargaining is likely to become, the fact that unionism and collective bargaining characterize the nation's largest states suggests that the matter is no 9-days' wonder, and that increasingly administrators and managers must be provided some preparation to enable them to deal with a union.

Some specific suggestions are now appropriate to correct matters which we have quite seriously criticized. The overall principal weakness of academic programs in higher education seems to be a problem of numbers, with the distinct impression that the larger programs accept too many candidates for the number of full-time equivalent faculty assigned to the program. This judgment, of course, is based on some assumptions regarding the nature of graduate education, and especially the nature of dissertation work. It is assumed that a full-time faculty member in a program will teach on an average of two courses each term, whether it be a quarter system or a semester system. It is also assumed that faculty time in a graduate program should be divided approximately between teaching and related activities, and research and scholarship, some of which will of necessity involve field work and some kinds of services to the field. If this is a reasonable portrait of use of faculty time, then using the number of full-time equivalent faculty available to the program as a planning statistic, an approximation of optimum enrollment can be developed. Approximately two doctoral degrees per year is a reasonable load for each full-time faculty member. If candidates for degrees in higher education perform as candidates for degrees in the arts or sciences they will suffer approximately a 50% attrition rate between point of matriculation and receipt of degrees. Thus two

candidates should be enrolled for every one degree anticipated to be completed. This means that the primary capacity consideration is faculty time.

Consistent with this view about enrollments is the belief that programs properly ought to be quite parsimonious with respect to claims made and distinct subspecialties offered. Our present impression is that courses offered in programs in higher education in aggregate represent a core of materials appropriate for a generalist, on the assumption that administrative specialization will likely come later, based on the individual's own abilities and the condition of the market for academic administrators. There are, to be sure, a few subspecialties which have been developed programatically and which do appear to prepare specialists. Student personnel work, institutional research, and, ostensibly at least, junior college administration are the clearest examples. However, even these subspecialties, on closer examination, appear more generalist in orientation than technical. Within the student personnel domain, counseling and testing appear to be the only professional activities which require considerable clinical experience and technical expertise in order to be adequately qualified. Programs in higher education might consider themselves as generalist preparation for individuals who will continue to do as they have in the past—gain specialized knowledge on the job—or who would develop specific expertise outside the school of education or in the school of education, if it maintained appropriate strength in a relevant specialty such as tests and measurements or counseling. Thus, individuals wishing to enter the financial side of collegiate administration would obtain general preparation from courses and activities in departments of higher education and specialized preparation in a school of business. As one reflects on the administrative needs of colleges and universities, the outside fields which conceivably could provide specialized training are probably psychology, sociology, political science, economics, law, business, architecture, and engineering. Other relationships could be available for persons having very specific career objectives, as for example the MD student who truly aspires to enter administrative work in medical education.

The third major recommendation which speaks directly to some of the weaknesses is to reorganize the degree structure. As has been noted, some programs offer the PhD, some the EdD, and some both. However, it is our impression that the differentiation between the EdD and PhD has become blurred and that the PhD in higher education represents a compromise between the needs of aspiring administrators and the requirements normally expected of PhD candidates, such as a genuinely research-based dissertation. It might be better, given the nature of departments of higher education and the destinations of their graduates, to refurbish the EdD and make it definitely a program for practitioners. Dissertations would normally be clearly of the applied variety and would not demand that a student develop an elaborate theoretical base which he or she very likely would not understand. The EdD degree so conceived could make considerable use of internships and would require dissertations frequently of the case-study or survey variety. The PhD degree in such a system would be preserved as a

genuine research degree which would require students to gain research competency in an appropriate discipline, roughly the equivalent to the competency developed by PhDs in those disciplines.

DOCTORAL-LEVEL GRADUATES WITH HIGHER EDUCATION AS A SPECIALIZED FIELD OF STUDY

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This study was conducted to identify and to analyze the educational and employment characteristics of doctoral graduates in higher education as a specialized field of study from selected universities and to assess the usefulness of selected competencies in terms of the doctoral graduates' employment. The population for this study included the 1963, 1966, 1969, and 1972 doctoral graduates in higher education from nine universities. The rationale for selecting the years and universities was as follows. The years prior to 1963 were not selected because the numbers of graduates were too few for comparative purposes. In order to obtain input from the more recent graduates, the 1972 graduates were included in the population. With the 1963 through 1972 period established, a 3-year interval was used, which resulted in the years selected.

As pointed out in a study conducted by Rogers, the precise number of universities offering doctoral programs in higher education has not been identified due to the absence of criteria for determining what constitutes a program in higher education.[1] Instead of selecting a representative sample from an unkown population, a decision was made to use the leading programs in higher education as identified by Higgins.[2] To obtain the names

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This report is derived from a doctoral dissertation on the same subject completed at Florida State University. Highlights of this study were presented at the 1974 APHE Annual Conference. The author now is Assistant Director, Academic Affairs for the Commission.

[1] James F. Rogers, *Higher Education as a Field of Study at the Doctoral Level* (Washington, D.C.: American Association for Higher Education, 1969).

[2] Arthur Stephen Higgins, "The Rating of Selected Fields of Doctoral Study in the Graduate Schools of Education: An Opinion Survey" (Unpublished doctoral dissertation, Columbia University, 1968). Higgins replicated this study in 1971 with essentially the same results.

and current addresses of the doctoral graduates, a request was made to the department chairman of higher education at each of the universities. After an initial inquiry, it was learned that the University of Chicago had only a few doctoral graduates during the years selected for the study and, therefore, it was omitted from the population. Table 1 presents the number of doctoral graduates by institution and year the doctorate was awarded.

A questionnaire was designed to obtain information relating to the doctoral graduates' education, employment, and assessment of doctoral studies. The initial mailing of the questionnaire was made during the period July through September 1973. As Table 1 indicates, the total number of useable questionnaires was 415, or an 83 percent response rate.

Results of the questionnaire were coded, and these data were keypunched onto computer cards. The Statistical Package for the Social Sciences (SPSS) was used to tabulate the item responses. Also, the SPSS was used to compile two-way to n-way crosstabulations of variables and to compute descriptive statistics and chi square analyses.

Educational Backgrounds

The major fields of study for the baccalaureate by the year the doctoral degree was awarded are presented in Table 2. All but one of the 415 respondents received a baccalaureate. With reference to Table 2, the categories of humanities, communications, and fine arts need clarification. The humanities category includes foreign language, English, religion, and philosophy. Radio, television, journalism, and speech were grouped into the category of communications. Fine arts which is listed in the category designated "other" in Table 2 includes art, drama, music, and dance.

A chi square analysis indicated no significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates in their major fields of study for the baccalaureate. However, the percentage of respondents receiving a baccalaureate in education was below the national percentage of doctorates whose baccalaureate and doctorate were both in education. For the years 1966, 1969, and 1972, publications by the National Academy of Sciences indicated that the national percentages of doctorates in education with a baccalaureate in the same field were as follows: 1966—43 percent,[3]

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[3]Office of Scientific Personnel, *Doctorate Recipients from United States Universities, 1958-1966* (Washington, D.C.: National Research Council, National Academy of Sciences, 1967), p. 44.

TABLE 1

Number of Doctoral Graduates and Frequency and Percentage Responding to Questionnaire by Institution and Year Doctorate Awarded

Institution[a]	Year Doctorate Awarded														
	1963			*1966*			*1969*			*1972*			*Total*		
	No.	Responding		No.	Responding		No.	Responding		No.	Responding		No.	Responding	
		No.	%		No.	%		No.	%		No.	%		No.	%
UC-Berkeley	5	3	60.0	20	11	55.0	18	15	83.3	20	17	85.0	63	46	73.0
Michigan	6	6	100.0	9	9	100.0	22	20	90.0	11	9	81.8	48	44	91.7
Columbia	3	3	100.0	11	8	72.7	23	16	69.9	11	7	63.6	48	34	70.8
Stanford	3	1	33.3	--	--	85.7	6	5	83.3	10	9	90.0	26	21	80.8
UCLA	4	4	100.0	10	8	80.0	15	14	93.3	6	5	83.3	35	31	88.6
Michigan State	0	--	--	8	6	75.0	25	17	68.0	32	26	81.3	65	49	75.4
Florida	6	6	100.0	14	10	71.4	16	14	87.5	16	15	93.8	52	45	86.5
Florida State	4	3	75.0	16	16	100.0	13	11	84.6	22	20	90.9	55	50	90.9
Indiana	9	8	88.9	25	19	76.0	29	25	86.2	44	43	97.7	107	95	88.8
Total	40	34	85.0	120	93	77.5	167	137	82.0	172	151	87.8	499	415	83.2

[a]Institutions are listed in rank order according to the results of the study on leading doctoral programs in higher education by Higgins.

TABLE 2

Major Field of Baccalaureate by Year Doctorate Awarded

Field of Baccalaureate	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Social Science	11	32.4	29	31.3	48	35.0	45	29.7	133	32.1
Education	8	23.5	19	20.6	23	16.8	30	19.9	80	19.2
Humanities	4	11.8	17	18.4	26	19.0	26	17.2	73	17.7
Science/Mathematics	4	11.8	4	4.4	16	11.7	19	12.6	43	10.5
Business Administration	2	5.9	5	5.5	9	6.6	9	6.0	25	6.3
Communications	3	8.8	6	6.6	6	4.4	7	4.6	22	5.2
Engineering/Agricultural	1	2.9	6	6.6	5	3.6	6	4.0	18	4.2
Other[a]	1	2.9	6	6.6	4	2.9	9	6.0	20	4.8
Total	34	100.0	92	100.0	137	100.0	151	100.0	414[b]	100.0

Note.—Chi square=12.363 with 21 degrees of freedom. Not significant at .05 level.
Column percentages in this table and all tables hereafter were rounded in order that the column totals would equal 100.0 percent.

[a]Other includes: Fine Arts—8; Social Welfare—3; Nursing—6; Home Economics—2; and undetermined—1.

[b]One respondent did not receive a baccalaureate.

1969—46 percent,[4] and 1972—53 percent.[5] In the present study, the percentage of respondents with a baccalaureate in education was less than half the national norm for all doctorates in education.

Table 3 displays the respondents' major fields of study for the master's degree. Five doctoral graduates did not receive a master's degree; however, one of the five received a law degree. In responding to the questionnaire, 31 respondents (8 percent) indicated that they received two degrees at the master's level. In these cases, only the field of study for the first master's degree is displayed in Table 3.

A chi square analysis indicated no significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates in their major fields of study for the master's degree. To provide a sufficient number of observations for the chi square analysis, it was necessary to incorporate the categories of communications and engineering/agricultural into the category "other."

As was true for the baccalaureate major field of study, the percentage of respondents with a master's degree in education was less than the national percentage of doctorates in education. The national percentages for doctorates in education with a master's in the same field were as follows: 1966—77 percent,[6] 1969—97 percent,[7] and 1972—91 percent.[8] The percentages for respondents in this study with master's degrees in education were as follows: 1966—55 percent, 1969—57 percent, and 1972—59 percent.

With reference to major fields of study, 49 percent of the respondents had master's degrees in the same fields of study as indicated for their baccalaureate. Also, 38 percent of the respondents received both the baccalaureate and master's degrees from the same institution.

The respondents' subfields of study within higher education are given in Table 4. In responding to the question regarding subfield, 42 (10 percent) of the respondents checked more than one subfield. Of this number, 12 respondents did not designate which subfield was considered first or primary. In these 12 cases, the subfield which most closely corresponded to

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[4] Office of Scientific Personnel, *Summary Report 1969: Doctorate Recipients from United States Universities* (Washington, D.C.: National Research Council, National Academy of Sciences, 1970), p. 7.

[5] Office of Scientific Personnel, *Summary Report 1972: Doctorate Recipients from United States Universities* (Washington, D.C.: National Research Council, National Academy of Sciences, 1973), p. 9.

[6] Office of Scientific Personnel, *Doctorate Recipients from United States Universities, 1958-1966*, p. 44.

[7] Office of Scientific Personnel, *Summary Report 1969*, p. 7.

[8] Office of Scientific Personnel, *Summary Report 1972*, p. 9.

TABLE 3

Major Field of Master's by Year Doctorate Awarded

Field of Master's	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Education	19	55.9	51	55.4	75	55.6	88	59.0	233	56.8
Social Science	6	17.7	16	17.4	23	17.0	19	12.8	64	15.6
Humanities	2	5.9	8	8.7	12	8.9	12	8.1	34	8.3
Business Administration	3	8.8	7	7.6	7	5.2	6	4.0	23	5.6
Science/Math	1	2.9	2	2.2	6	4.4	9	6.0	18	4.4
Other[a]	3	8.8	8	8.7	12	8.9	15	10.1	38	9.3
Total	34	100.0	92	100.0	135	100.0	149	100.0	410[b]	100.0

Note.—Chi square = 6.034 with 15 degrees of freedom. Not significant at .05 level.

[a]Other includes: Fine Arts—3; Communications—11; Social Welfare—5; Nursing—6; Library Science—1; Engineering—5; Agriculture—2; and Theology—5.

[b]Five respondents did not receive a master's degree.

TABLE 4

Subfield of Doctorate in Higher Education by Year Doctorate Awarded

Subfield	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Administration	9	26.5	23	24.7	37	27.1	42	27.8	111	26.7
Student Personnel	4	11.8	23	24.7	24	17.5	45	29.9	96	23.1
Community College	9	26.5	22	23.7	31	22.6	24	15.9	86	20.7
Curriculum/Instruction	6	17.6	8	8.6	17	12.4	12	7.9	43	10.4
Business	4	11.8	5	5.4	8	5.8	7	4.6	24	5.8
Institutional Research	1	2.9	4	4.3	8	5.8	9	6.0	22	5.3
Other	1	2.9	8	8.6	12	8.8	12	7.9	33	8.0
Total	34	100.0	93	100.0	137	100.0	151	100.0	415	100.0

Note.—Chi square = 17.714 with 18 degrees of freedom. Not significant at .05 level.

the respondents' functional area of employment for the first postdoctoral position was tabulated. With reference to the respondents' subfield, student personnel, academic administration, and community college administration accounted for 71 percent of the total subfields of study within higher education. As Table 4 indicates, there was no significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates in their doctoral subfields of study.

To determine whether a relationship existed between the field of study at the master's level and the subfield of study at the doctoral level, a chi square analysis was made. Table 5 presents the results of the chi square analysis which indicated a relationship between the master's field of study and the doctoral subfield. Further examination of the data indicated that the respondents with a master's in education were more likely to select student personnel as their doctoral subfield. Conversely, the respondents with master's in fields other than education generally selected academic administration as their subfield. Also, there appeared to be a relationship between master's degrees in science or mathematics and the subfield of institutional research, and between master's degrees in the social sciences and the subfield of community college administration. With reference to institutional origin of degrees, 35 percent of the doctoral graduates received their master's degree and doctorate from the same institution.

The median time lapse in calendar years between the awarding of the baccalaureate and the doctorate for each year was as follows: 1963—12.4, 1966—14.3, 1969—13.5, and 1972—10.8. The median time for all the respondents was 12.1 years. Although the time lapse between the baccalaureate and doctorate varied somewhat among the years the doctorate was awarded, the difference was not significant at the .05 level. The Research Council of the National Academy of Science reported median time lapse in years between baccalaureate and doctorate for all doctoral graduates in education to be as follows: 1966—13.5,[9] 1969—13.3,[10] and 1972—10.8.[11] Compared with the national norm, the respondents' median time lapse, for each year the doctorate was awarded, was within .5 of a year.

The doctoral graduates received either the Doctor of Philosophy or Doctor of Education degree. From 1963 to 1972, there was a pronounced trend toward the award of the PhD. The percentage of PhDs awarded for each year was as follows: 1963—27 percent, 1966—39 percent, 1969—50 percent, and 1972—52 percent.

The median age of the respondents at the time the doctorate was awarded for each of the 4 years was as follows: 1963—34.7, 1966—37.9, 1969—37.1, and 1972—33.2. Although the median age fluctuated somewhat among the

[9] Office of Scientific Personnel, *Doctorate Recipients from United States Universities, 1958-1966*, p. 66.

[10] Office of Scientific Personnel, *Summary Report 1969*, p. 7.

[11] Office of Scientific Personnel, *Summary Report 1972*, p. 9.

TABLE 5

Subfield of Doctorate by Master's Field of Study

Subfield of Doctorate	Master's Field of Study													
	Education		*Social Science*		*Humanities*		*Business Administration*		*Science/ Mathematics*		*Other*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Administration	44	18.9	19	29.7	16	47.0	10	43.6	7	38.9	14	36.9	110	26.7
Student Personnel	76	32.6	8	12.5	5	14.7	3	13.0	0	0.0	3	7.9	95	23.2
Community College	50	21.5	16	25.0	4	11.8	5	21.8	2	11.1	7	18.4	84	20.5
Curriculum/ Instruction	27	11.6	6	9.4	4	11.8	1	4.3	2	11.1	3	7.9	43	10.5
Business	14	6.0	2	3.1	1	2.9	3	13.0	0	0.0	4	10.5	24	5.9
Institutional Research	8	3.4	5	7.8	2	5.9	0	0.0	6	33.3	1	2.6	22	5.4
Other	14	6.0	8	12.5	2	5.9	1	4.3	1	5.6	6	15.8	32	7.8
Total	233	100.0	64	100.0	34	100.0	23	100.0	18	100.0	38	100.0	410	100.0

Note.—Chi square = 84.85 with 30 degrees of freedom. Significance level: $p < .05$.

4 years, a chi square analysis indicated no significant difference at the .05 level. The Research Council reported median age for all doctoral graduates in education to be as follows: 1966—38.4,[12] 1969—37.3,[13] and 1972—34.4.[14]

The percentage of females for each year the doctorate was awarded was as follows: 1963—18 percent, 1966—15 percent, 1969—12 percent, and 1972—18 percent. A chi square analysis indicated no significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates and the sex ratios of the graduates. However, the national percentage of female doctorates in education was higher. For the years 1966, 1969, and 1972, the national percentages of females receiving doctorates in education were 19 percent,[15] 19 percent,[16] and 23 percent,[17] respectively.

Employment Patterns and Professional Activities

In the last position of employment before beginning doctoral studies, 71 percent of the respondents were employed in government or nonprofit associations related to higher education and in institutions of higher education. As may be observed in Table 6, public colleges and universities were the major employers. The category "other" includes data pertaining to two respondents who were unemployed and seven respondents who were students prior to beginning their doctoral work.

A chi square value of 14.292 with nine degrees of freedom indicated no significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates in the types of employers during the respondents' last predoctoral positions. As the number of observations for most of the categories in Table 6 was low, the chi square test was made using the following categories: (a) public and independent community college; (b) public college and university; (c) independent college and university; and (d) "other" which includes all of the remaining categories in Table 7.

For the 284 respondents (69 percent) who were employed in institutions of higher education during their last predoctoral positions, Table 7 presents the functional areas of employment in institutions of higher education. The leading functional areas of employment were academic affairs, teaching, and student affairs with 36 percent, 26 percent, and 23 percent, respectively.

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[12] Office of Scientific Personnel, *Doctorate Recipients from United States Universities, 1958-1966*, p. 11.

[13] Office of Scientific Personnel, *Summary Report 1969*, p. 7.

[14] Office of Scientific Personnel, *Summary Report 1972*, p. 9.

[15] Office of Scientific Personnel, *Doctorate Recipients from United States Universities, 1958-1966*, p. 11.

[16] Office of Scientific Personnel, *Summary Report 1969*, p. 7.

[17] Office of Scientific Personnel, *Summary Report 1972*, p. 9.

TABLE 6

Type of Employer of Last Predoctoral Position by Year Doctorate Awarded

Type of Employer	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Public College/University	9	26.6	21	22.6	40	29.9	59	39.1	129	31.4
Public Community College	7	20.6	25	26.9	22	16.1	25	16.5	79	19.0
Independent College/ University	5	14.7	14	15.0	30	22.6	24	15.9	73	17.5
Elementary/Secondary School	8	23.5	12	12.9	27	19.0	13	8.6	60	14.4
Military	2	5.9	6	6.4	5	2.9	7	4.6	20	4.8
Business/Industry	1	2.9	5	5.4	3	2.2	1	.7	10	2.4
Nonprofit Association—not related to Higher Education	1	2.9	4	4.3	2	1.5	1	.7	8	1.9
State Government—not related to Higher Education	0	0.0	1	1.1	1	.7	6	4.0	8	1.9
Federal Government—not related to Higher Education	0	0.0	1	1.1	1	.7	5	3.3	7	1.7
Nonprofit Association—related to Higher Education	0	0.0	1	1.1	1	.7	2	1.3	4	1.0
State Government—related to Higher Education	1	2.9	0	0.0	1	.7	2	1.3	4	1.0
Independent Community College	0	0.0	1	1.1	2	1.5	0	0.0	3	.7
Federal Government—related to Higher Education	0	0.0	0	0.0	0	0.0	1	.7	1	.2
Other	0	0.0	2	2.1	2	1.5	5	3.3	9	2.1
Total	34	100.0	93	100.0	137	100.0	151	100.0	415	100.0

TABLE 7

Functional Areas of Employment of Last Predoctoral Position in Institutions of Higher Education by Year Doctorate Awarded

Functional Area	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Student Affairs	3	14.3	15	25.0	34	36.2	51	46.8	103	36.2
Teaching	11	52.4	16	26.7	25	26.6	22	20.2	74	26.0
Academic Affairs	4	19.0	23	38.3	19	20.2	19	17.4	65	22.9
Development	2	9.5	3	5.0	5	5.3	1	.9	11	3.9
Institutional Research	0	0.0	0	0.0	3	3.2	7	6.4	10	3.5
General Administration	0	0.0	2	3.3	4	4.3	1	.9	7	2.5
Business Affairs	0	0.0	0	0.0	2	2.1	4	3.7	6	2.1
Adult/Continuing Education	1	4.8	1	1.7	0	0.0	1	.9	3	1.1
Other	0	0.0	0	0.0	2	2.1	3	2.8	5	1.8
Total	21	100.0	60	100.0	94	100.0	109	100.0	284[a]	100.0

[a]131 respondents were not employed by institutions of higher education.

A chi square value of 24.673 with nine degrees of freedom indicated a significant difference with $p < .05$ among the 1963, 1966, 1969, and 1972 doctoral graduates in the functional areas of employment in institutions of higher education during their last predoctoral positions. To provide a sufficient number of observations for each category, the chi square test was made using the following categories: (a) academic affairs; (b) student affairs; (c) teaching; and (d) "other" which includes all of the remaining categories in Table 7. Examination of the data in Table 7 indicated the significant difference to be attributed to increased frequency, above the expected, in the following functional areas: 1963—teaching, 1966—academic affairs, and 1969 and 1972—student affairs.

As the previous analysis revealed, there was a significant relationship between the respondents' major field of study at the master's level and subfield of study at the doctoral level. As Table 8 indicates, there was also a significant relationship between the respondents' functional areas of employment in institutions of higher education during their last predoctoral positions and the respondents' subfield of study at the doctoral level. Examination of the results indicated that those respondents teaching in institutions of higher education were likely to select curriculum and instruction as their subfield of study. Also, there was a close relationship between the functional area of student affairs and the subfield of student personnel at the doctoral level.

From the position titles of the respondents, the hierarchical level was identified for those positions in institutions of higher education. The following topology was used in the hierarchical classification of position titles:

First level—reports to board of trustees or chief executive officer of a college or university system (e.g., presidents).

Second level—reports to the chief executive officer of the college or university (e.g., vice president, assistant to the president).

Third level—reports to second level administrators (e.g., dean, assistant vice president).

Fourth level—reports to third level administrators (e.g., department chairman, assistant dean).

Other staff—includes those positions below the fourth level which do not involve teaching as a primary function (e.g., research associate, counselor, assistant director).

Faculty—includes all personnel whose primary function was teaching (e.g., instructor, assistant professor, associate professor, professor).

As the hierarchical levels in colleges and universities vary with respect to position titles, reference was made to the *Educational Directory* for

TABLE 8

Subfield of Doctorate by Functional Area of Employment of Last Predoctoral Position in Institutions of Higher Education

Subfield of Doctorate	Functional Area								Total	
	Student Affairs		*Teaching*		*Academic Affairs*		*Other*			
	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Administration	21	20.4	23	31.1	27	41.6	15	35.7	86	30.3
Student Personnel	57	55.4	6	8.1	6	9.2	2	4.8	71	25.0
Community College	13	12.6	13	17.6	21	32.3	10	23.8	57	20.1
Curriculum/Instruction	0	0.0	22	29.7	1	1.5	0	0.0	23	8.1
Business	4	3.9	2	2.7	4	6.2	6	14.3	16	5.6
Institutional Research	2	1.9	4	5.4	3	4.6	3	7.1	12	4.2
Other	6	5.8	4	5.4	3	4.6	6	14.3	19	6.7
Total	103	100.0	74	100.0	65	100.0	42	100.0	284	100.0

Note.—Chi square = 146.386 with 18 degrees of freedom. Significance = $p < .05$

classifying positions into hierarchical levels.[18] Table 9 shows the hierarchical levels of the respondents' last predoctoral positions in institutions of higher education. A chi square value of 24.853 with 12 degrees of freedom indicated a significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates in the hierarchical levels of their last predoctoral positions in institutions of higher education. To provide a minimum number of observations for each category for the chi square test, it was necessary to combine first and second levels of Table 9 into one category. Further examination of the data in Table 9 indicated that the significant difference was attributed to observations above the expected frequency for the following hierarchical levels: 1963—faculty, 1966—faculty and third level, and 1969—other-staff and faculty. The doctoral graduates of 1963 and 1972 appeared to have less representation in the first and second levels. The mean ending salary of the respondents' last predoctoral positions for each year was 1963—$7,966, 1966—$9,539, 1969—$10,228, and 1972—$11,288. As might be expected, in light of economic trends, there was an increase in the ending salary for each period. However, the increase fluctuated from a high of 19.7 percent in 1966 to a low of 7.2 percent in 1969.

The *Summary Report 1969* of the Office of Scientific Personnel indicated that 61 percent of the doctorates in education were employed in first postdoctoral positions which were related to the graduates' doctoral program.[19] As Table 10 indicates, the percentage of respondents in this study whose first postdoctoral positions related to their doctoral program in higher education was considerably higher. After receiving the doctorate, 93 percent of the respondents were employed in government or nonprofit associations related to higher education and in institutions of higher education. As public colleges and universities were the major employers for the respondents' last predoctoral positions, the same was true of the respondents' first postdoctoral positions. In Table 10, the category "other" includes two respondents who pursued postdoctoral study in lieu of employment and three 1972 doctoral graduates who had not been employed since being awarded the doctorate.

A chi square value of 12.038 with nine degrees of freedom indicated no significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates in the types of employers during the respondents' first postdoctoral positions. To provide a sufficient number of observations for each category, the chi square test was made using the following categories: (a) public and independent community college; (b) public college and

[18]U.S. Office of Education, *Educational Directory, 1962-63; Part III: Higher Education* (Washington, D.C.: Government Printing Office, 1963); U.S. Office of Education, *Educational Directory, 1965-66; Part III: Higher Education* (Washington, D.C.: Government Printing Office, 1966); U.S. Office of Education, *Educational Directory, 1968-69; Part III: Higher Education* (Washington, D.C.: Government Printing Office, 1969); U.S. Office of Education, *Educational Directory, 1971-72; Part III: Higher Education* (Washington, D.C.: Government Printing Office, 1972).

[19]Office of Scientific Personnel, *Summary Report 1969*, p. 1.

TABLE 9

Hierarchical Level of Last Predoctoral Position in Institutions of Higher Education by Year Doctorate Awarded

Hierarchical Level	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
First Level	1	4.7	0	0.0	0	0.0	0	0.0	1	.3
Second Level	1	4.7	10	16.7	18	19.1	10	9.2	39	13.6
Third Level	3	14.3	16	26.7	12	12.8	29	26.6	60	21.2
Fourth Level	3	14.3	10	16.7	13	13.8	25	22.9	51	18.0
Other—Staff	2	9.5	8	13.2	26	27.7	23	21.1	59	20.8
Faculty	11	52.5	16	26.7	25	26.6	22	20.2	74	26.1
Total	21	100.0	60	100.0	94	100.0	109	100.0	284[a]	100.0

[a] 131 respondents were not employed by institutions of higher education.

TABLE 10

Type of Employer of First Postdoctoral Position by Year Doctorate Awarded

Type of Employer	Year Doctorate Awarded								Total	
	1963		1966		1969		1972			
	No.	%	No.	%	No.	%	No.	%	No.	%
Public College/University	12	35.3	33	35.4	60	43.8	71	46.9	176	42.4
Public Community College	9	26.5	30	32.2	31	22.6	34	22.5	104	25.1
Independent College/ University	9	26.5	19	20.4	26	19.0	18	11.9	72	17.3
Nonprofit Association—related to Higher Education	3	8.8	2	2.2	6	4.4	6	4.0	17	4.0
Elementary/Secondary School	1	2.9	1	1.1	3	2.2	6	4.0	11	2.7
State Government—related to Higher Education	0	0.0	1	1.1	6	4.4	3	2.0	10	2.4
Business/Industry	0	0.0	3	3.2	0	0.0	2	1.3	5	1.2
Independent Community College	0	0.0	1	1.1	2	1.5	1	.7	4	1.0
Nonprofit Association—not related to Higher Education	0	0.0	2	2.2	1	.7	1	.7	4	1.0
Federal Government—related to Higher Education	0	0.0	0	0.0	1	.7	3	2.0	4	1.0
State Government—not related to Higher Education	0	0.0	0	0.0	1	.7	1	.7	2	.5
Federal Government—not related to Higher Education	0	0.0	0	0.0	0	0.0	1	.7	1	.2
Military	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	1	1.1	0	0.0	4	2.6	5	1.2
Total	34	100.0	93	100.0	137	100.0	151	100.0	415	100.0

university; (c) independent college and university; and (d) "other" which includes all of the remaining categories in Table 10.

For the 356 respondents (86 percent) who were employed in institutions of higher education during their first postdoctoral position, Table 11 presents the functional areas of employment in colleges and universities. As was the case of the respondents' last predoctoral positions, the leading functional areas of employment during their first postdoctoral positions were academic affairs (30 percent), teaching (26 percent), and student affairs (26 percent).

A chi square value of 33.731 with nine degrees of freedom indicated a significant difference with $p < .05$ among the 1963, 1966, 1969, and 1972 doctoral graduates in the functional areas of employment in colleges and universities during their first postdoctoral positions. The categories "business affairs" and "development" were combined with the category "other" to provide a sufficient number of observations for each category for the chi square analysis. Examination of the data in Table 11 revealed the significant difference to be attributed to an increased frequency, above the expected, in the following functional areas: 1963—academic affairs, 1966—general administration and academic affairs, and 1969—teaching. Also, there was an increased frequency in the functional area of institutional research for the years 1969 and 1972.

To determine whether there was a relationship between the doctoral graduates' functional areas of employment during their first postdoctoral positions and their subfield of study at the doctoral level, these two variables were crosstabulated and the results are presented in Table 12. A chi square test indicated a significant relationship at the .05 level between the first postdoctoral job function and the subfield of study for the doctorate. Examination of the data indicated that the subfields of student affairs, academic affairs, curriculum and instruction, and community college administration corresponded with the functional areas of student personnel, academic administration, teaching, and academic administration, respectively. There was also a relationship between the subfield of institutional research and the functional areas of institutional research and teaching.

Table 13 shows the hierarchical levels of the doctoral graduates' first postdoctoral positions in institutions of higher education. A chi square value of 25.024 with 12 degrees of freedom indicated a significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates with reference to the hierarchical levels of their first postdoctoral positions in colleges and universities. For the chi square test, the first and second levels of Table 13 were combined into one category to provide a sufficient number of observations. Analysis of the data indicated that the 1963 and 1966 doctoral graduates were employed at the first and second levels more often than the 1969 and 1972 graduates. Also, a higher percentage of the 1969 doctoral graduates were employed as faculty. The beginning mean annual salaries for the doctoral graduates' first postdoctoral positions were as follows: 1963—$10,969, 1966—$12,464, 1969—$14,305, and 1972—$15,803.

TABLE 11

Functional Area of Employment of First Postdoctoral Position in Institutions of Higher Education by Year Doctorate Awarded

Functional Area	Year Doctorate Awarded									
	1963		1966		1969		1972		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Affairs	17	56.8	28	33.8	25	21.0	36	29.0	106	29.7
Student Affairs	3	10.0	20	24.1	33	27.7	35	28.2	91	25.6
Teaching	6	20.0	18	21.7	39	32.9	28	22.6	91	25.6
Institutional Research	1	3.3	2	2.4	9	7.6	9	7.3	21	5.9
General Administration	0	0.0	9	10.8	5	4.2	4	3.2	18	5.1
Adult/Continuing Education	1	3.3	3	3.6	3	2.5	9	7.3	16	4.5
Development	1	3.3	2	2.4	3	2.5	1	.8	7	2.0
Business Affairs	0	0.0	0	0.0	1	.8	2	1.6	3	.8
Other	1	3.3	1	1.2	1	.8	0	0.0	3	.8
Total	30	100.0	83	100.0	119	100.0	124	100.0	356[a]	100.0

[a] 59 respondents were not employed by institutions of higher education.

TABLE 12

Subfield of Doctorate by Functional Area of Employment of First Postdoctoral Position in Institutions of Higher Education

Subfield of Doctorate	Functional Area															
	Academic Affairs		Student Affairs		Teaching		Institutional Research		General Administration		Adult/Continuing Education		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Administration	45	42.5	12	13.2	22	24.2	5	23.8	6	33.3	8	50.0	1	7.7	99	27.8
Student Personnel	7	6.6	53	58.2	15	16.5	3	14.3	2	11.1	3	18.7	1	7.7	84	23.6
Community College	43	40.6	14	15.4	8	8.8	3	14.3	5	27.8	4	25.0	2	15.3	79	22.2
Curriculum/Instruction	3	2.8	1	1.1	31	34.0	0	0.0	0	0.0	0	0.0	1	7.7	36	10.1
Business	5	4.7	2	2.2	4	4.4	4	19.0	2	11.1	0	0.0	4	30.8	21	5.9
Institutional Research	3	2.8	1	1.1	6	6.6	6	28.6	0	0.0	0	0.0	0	0.0	16	4.5
Other	0	0.0	8	8.8	5	5.5	0	0.0	3	16.7	1	6.3	4	30.8	21	5.9
Total	106	100.0	91	100.0	91	100.0	21	100.0	18	100.0	16	100.0	13	100.0	356	100.0

Note.—Chi square = 265.408 with 36 degrees of freedom. Significance: $p < .05$.

TABLE 13

Hierarchical Level of First Postdoctoral Position in Institutions of Higher Education by Year Doctorate Awarded

Hierarchical Level	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
First Level	0	0.0	3	3.6	2	1.7	1	.8	6	1.7
Second Level	9	30.0	26	31.3	21	17.6	15	12.1	71	19.9
Third Level	4	13.3	18	21.7	25	21.0	36	29.0	83	23.4
Fourth Level	9	30.0	13	15.7	21	17.6	29	23.4	72	20.2
Other—Staff	2	6.7	5	6.0	11	9.2	15	12.1	33	9.2
Faculty	6	20.0	18	21.7	39	32.9	28	22.6	91	25.6
Total	30	100.0	83	100.0	119	100.0	124	100.0	356[a]	100.0

[a]59 respondents were not employed by institutions of higher education.

In describing the characteristics of the doctoral graduates' current positions of employment, it should be noted that 147 respondents (35 percent) were still employed in their first postdoctoral positions at the time of the survey. Percentages for respondents whose first postdoctoral positions were the same as their current positions were as follows: 1963—6 percent, 1966—12 percent, 1969—27 percent, and 1972—64 percent.

In their current positions of employment, 91 percent of the respondents were employed in positions related to the field of higher education. As Table 14 indicates, 83 percent of the respondents were employed in institutions of higher education. Public colleges and universities were the largest employer, employing 42 percent of the doctoral graduates. A chi square value of 5.877 with nine degrees of freedom indicated no significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates with reference to the type of employer for their current positions. The categories used for the chi square analysis were as follows: (a) public and independent community college, (b) public college and university, (c) independent college and university, and (d) "other" which includes the remaining categories in Table 14.

For the 342 respondents currently employed in institutions of higher education, Table 15 presents the functional areas of employment. A chi square value of 38.615 with 18 degrees of freedom indicated a significant difference at the .01 level among the 1963, 1966, 1969, and 1972 doctoral graduates in their current functional areas of employment in colleges and universities. For the chi square test, the categories "business affairs" and "development" were combined with the category "other" to provide a sufficient number of observations. Analysis of the data concerning functional areas indicated that a higher percentage than expected[20] of the 1963 and 1966 respondents were employed in general administration and academic affairs while a higher percentage than expected of the 1969 and 1972 respondents were employed in the student affairs area. Also, a higher percentage, above the expected, of the 1969 doctoral graduates were teaching in colleges and universities.

Table 16 presents the hierarchical levels of the current positions of those respondents employed in institutions of higher education. A chi square test indicated a significant difference between the hierarchical levels of employment and the years in which the doctorate was awarded. In general, the data supported the assumption that the early doctoral graduates would be in higher level positions than the more recent graduates. Examination of the data indicated that the percentage of the 1963 and 1966 doctoral graduates' first level positions was higher than the percentage of either the 1969 or 1972 doctoral graduates. A significantly high percentage of the 1969 doctoral graduates were employed in faculty positions while the 1972 doctoral graduates had a higher percentage than expected in the third level and staff positions.

[20] "Higher percentage than expected" means that the observed frequencies were greater than the calculated expected frequencies, and the difference was not due to a chance departure.

TABLE 14

Type of Employer of Current Position by Year Doctorate Awarded

Type of Employer	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Public College/University	13	39.5	35	37.5	57	41.0	68	45.0	173	41.7
Public Community College	8	24.2	24	25.8	35	25.5	37	24.5	104	25.1
Independent College/ University	4	12.1	17	18.3	25	18.2	18	11.9	64	15.5
Nonprofit Association—related to Higher Education	1	3.0	5	5.4	5	3.6	7	4.6	18	4.3
Elementary/Secondary School	1	3.0	4	4.3	3	2.2	5	3.3	13	3.1
State Government—related to Higher Education	3	9.1	1	1.1	3	2.2	5	3.3	12	2.9
State Government—not related to Higher Education	2	6.1	3	3.2	1	.7	1	.7	7	1.7
Business/Industry	0	0.0	2	2.2	3	2.2	2	1.3	7	1.7
Nonprofit Association—not related to Higher Education	1	3.0	1	1.1	2	1.5	1	.7	5	1.2
Federal Government—related to Higher Education	0	0.0	1	1.1	1	.7	1	.7	3	.7
Independent Community College	0	0.0	0	0.0	0	0.0	1	.7	1	.2
Federal Government—not related to Higher Education	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Military	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	3	2.2	5	3.3	8	1.9
Total	33	100.0	93	100.0	138	100.0	151	100.0	415	100.0

TABLE 15

Functional Area of Employment of Current Position in Institutions of Higher Education by Year Doctorate Awarded

Functional Area	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
Academic Affairs	9	36.0	28	36.8	30	25.6	37	29.8	104	30.3
Teaching	4	16.0	16	21.1	33	28.2	25	20.2	78	22.8
Student Affairs	1	4.0	12	15.8	26	22.2	35	28.2	74	21.6
General Administration	7	28.0	12	15.8	8	6.8	4	3.2	31	9.1
Institutional Research	3	12.0	2	2.6	9	7.7	10	8.1	24	7.0
Adult/Continuing Education	1	4.0	3	3.9	5	4.3	10	8.1	19	5.6
Business Affairs	0	0.0	3	3.9	1	.9	2	1.6	6	1.8
Development	0	0.0	0	0.0	3	2.6	1	.8	4	1.2
Other	0	0.0	0	0.0	2	1.7	0	0.0	2	.6
Total	25	100.0	76	100.0	117	100.0	124	100.0	342[a]	100.0

[a] 73 respondents were not employed by institutions of higher education.

TABLE 16

Hierarchical Level of Current Position in Institutions of Higher Education by Year Doctorate Awarded

Hierarchical Level	Year Doctorate Awarded									
	1963		*1966*		*1969*		*1972*		*Total*	
	No.	%	No.	%	No.	%	No.	%	No.	%
First Level	6	24.0	11	14.5	7	6.0	2	1.6	26	7.6
Second Level	4	16.0	15	19.7	24	20.5	19	15.3	62	18.1
Third Level	4	16.0	18	23.7	30	25.6	37	29.8	89	26.0
Fourth Level	7	28.0	14	18.4	17	14.5	29	23.4	67	19.6
Other--Staff	0	0.0	2	2.6	6	5.1	12	9.7	20	5.8
Faculty	4	16.0	16	21.1	33	28.3	25	20.2	78	22.9
Total	25	100.0	76	100.0	117	100.0	124	100.0	342[a]	100.0

[a]73 respondents were not employed in institutions of higher education.

The average number of positions, including different positions at the same institution, held by the respondents since they received the doctorate was as follows: 1963—3.1, 1966—2.7, 1969—2.1, and 1972—1.4. The average number of different employing institutions and organizations during the respondents' employment since receiving the doctorate was as follows: 1963—2.1, 1966—2.0, 1969—1.6, and 1972—1.2. Generally it may be said that one out of three changes in positions for the 1963 doctoral graduates was within the same institution. The average amount of time in which employment was related to higher education by year of graduation was as follows: 1963—96 percent, 1966—92 percent, 1969—94 percent, and 1972—90 percent.

The geographic location of the current position of employment, at the time of the survey, included 44 states and the District of Columbia. None of the respondents at the time of this survey was located in Alaska, Arizona, Louisiana, Maine, North Dakota, or Wyoming. Eight of the respondents were located in foreign countries which included Australia, Canada, England, the Philippines, Saudi Arabia, South Viet Nam, and Venezuela.

Twenty-seven percent of the respondents published their dissertations either in part or in full. Time lapse since receiving the doctorate was not a factor in whether the respondents published their dissertations. There was no significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates and the percentage of doctoral graduates who had their dissertations published. Each of 28 percent of the respondents published one or more books or monographs. The average number of books or monographs published by each of the 415 respondents was as follows: 1963—.7, 1966—.8, 1969—.7, and 1972—.3. There was a significant difference at the .05 level among the 1963, 1966, 1969, and 1972 doctoral graduates and the number of books and monographs they published. The significant difference was due to the lower than expected number of books or monographs published by the 1972 doctoral graduates. For the 1963, 1966, and 1969 graduates, the number of books and monographs published was not related to the number of years since the doctorate was awarded.

As was found for the publication of books and monographs, there was also a significant difference at the .001 level among the 1963, 1966, 1969, and 1972 doctoral graduates in the number of articles published. Examination of the data indicates that the significant difference in the number of articles published was attributed to the lower than expected number of articles published by the 1972 doctoral graduates. The range of the number of articles published was zero to 37 and the average number of articles published by each of the 415 respondents by year of graduation was as follows: 1963—2.9, 1966—3.0, 1969—2.1, and 1972—.5.

The range in the number of professional associations and societies of which the doctoral graduates were members was zero to 15, and the average number of memberships for each of the 415 respondents by year of graduation was as follows: 1963—3.8, 1966—3.5, 1969—3.2, and 1972—2.9. There was no significant difference among the 1963, 1966, 1969, and 1972

doctoral graduates in the number of professional associations and societies in which they were members.

Assessment of Doctoral Programs

There appears to be a lack of agreement as to the objectives and goals of higher education programs; however, a review of the literature reveals certain competencies, skills, and understandings which educators feel students should develop for effective career service. The last section of the questionnaire contains a list of 17 competencies, skills, and understandings (hereafter referred to as competencies) to which the respondents were requested to make two responses for each competency. The first response was a rating of the usefulness of each competency in terms of the graduates' present, or most recent, positions. The second response was to determine whether or not each competency was developed in the doctoral program.

Table 17 presents a comparison of the responses marked "essential" in the present position and the responses marked "yes" developed in the doctoral program. As may be observed in Table 17, there were considerable differences in the ratings of several competencies that were useful in the present position and competencies that were developed in the doctoral program. According to the data in Table 17, the following competencies should receive more emphasis in the doctoral program:

1. Competence in supervising work of others
2. Skill in problem solving and decision making
3. Competence in planning techniques
4. Competence in developing and interpreting budgets
5. Understanding of interpersonal relationships and group dynamics
6. Competence to teach effectively
7. Competence in advising and counseling students on personal, educational, or vocational problems.

To provide an overall assessment by the respondents of their doctoral programs, the following questions were asked:

1. How relevant to subsequent professional duties was your doctoral work in higher education?
2. If you were beginning your doctoral work over again, would you still select higher education as your major field of study?

In response to the first question, 84 percent of the respondents considered their doctoral programs to be either highly relevant or relevant to their subsequent professional duties. Thirteen percent considered the program somewhat relevant and less than 3 percent considered the program irrelevant. A chi square analysis indicated no significant difference among the 1963, 1966, 1969, and 1972 doctoral graduates in their ratings of the relevancy of the doctoral program.

TABLE 17

Comparison of Respondents' Ratings for Competencies Useful in Present Position to Ratings for Competencies Developed in Doctoral Program

	Ratings of Competencies	
	Usefulness in Present Position	*Developed in Doctoral Program*
Competencies, Abilities, or Understandings	% marked essential	% marked yes
Understanding history and development of higher education	26.5	75.7
Knowledge of current trends and problems in higher education	65.3	70.1
Competence to do research	38.5	56.0
Competence to teach effectively	36.0	8.8
Competence in advising and counseling students on personal, educational, or vocational problems	40.1	16.6
Knowledge of the use and application of computers	15.4	15.7
Competence in supervising work of others	64.9	12.5
Understanding of administrative theory	52.2	54.9
Competence in developing and interpreting budgets	54.2	54.9
Understanding of financial aspects of higher education	49.4	40.5
Understanding of interpersonal relationships and group dynamics	65.4	27.4
Understanding of legal aspects of higher education	35.3	35.0
Understanding of instructional technology and curriculum development	40.8	27.7
Skill in problem solving and decision making	76.8	25.9
Competence in planning techniques	65.3	18.2
Competence in quantitative techniques	28.1	21.9
Competence to serve as consultant on problems in higher education	28.6	34.6

To determine whether there was a significant difference in the respondents' ratings of relevancy and their functional areas of employment, a chi square test was made. To provide a minimum number of observations for the chi square analysis, it was necessary to combine the categories of "somewhat relevant" and "irrelevant." The chi square analysis indicated no significant difference at the .05 level in the respondents' ratings of relevancy and their functional areas of employment.

In response to the question, "If you were beginning your doctoral work over again, would you still select higher education as your major field of study," 76 percent of the doctoral graduates responded "yes." A chi square test indicated no significant difference at the .05 level in the responses among the 1963, 1966, 1969, and 1972 doctoral graduates. To provide a further analysis of this question, a chi square analysis was made of the responses by the respondents' functional areas of employment. There was a significant difference at the .05 level in the responses by functional areas of employment. This difference was attributed to a higher than expected percentage of the respondents in teaching, institutional research, and the category "other" answering "no" or "uncertain" about selecting higher education as their major field again. Of the 97 respondents who answered "uncertain" or "no" to the selection of higher education again, 81 indicated the field of study they would select if starting over again. The indicated fields of study were as follows: social science—27, another field in education—19, humanities—7, law—7, business administration—6, science—4, medical science—4, communications—3, social welfare—2, math—1, and fine arts—1. Four respondents stated that if they had it to do over again they would not begin a doctoral program of any kind.

Summary

The purpose of this study was to identify and to analyze the educational and employment characteristics of doctoral graduates in higher education and to assess the usefulness of selected competencies in terms of the doctoral graduates' employment. The population for this study were the 1963, 1966, 1969, and 1972 doctoral graduates in higher education from nine leading universities in that field of graduate study. The information for the study was obtained through a questionnaire which was mailed to 499 doctoral graduates. Useable responses were received from 415 doctoral graduates for a response rate of 83 percent. The Statistical Package for the Social Sciences was used to tabulate item responses, to compile crosstabulations of variables, and to compute descriptive statistics and chi square analyses.

Over 69 percent of the doctoral graduates in higher education received their baccalaureates in either social science, education, or humanities. Social science was the leading major field of study with 32 percent. The major fields of study for the master's degree were education with 57 percent and social science with 16 percent. At the doctoral level, student personnel, academic administration, and community college administration accounted for 70 percent of the subfields within higher education. Although the numbers of EdDs and PhDs awarded to respondents in this study were

approximately the same, there was a pronounced trend toward the PhD degree. The percentage of females receiving the doctorate was 15 percent. The median time lapse between the respondents' baccalaureate and doctorate was 12.1 years, and 35.6 years was the median age at the time the doctorate was awarded. The respondents did not differ appreciably from the national norms for doctorates in education with reference to time lapse between baccalaureate and doctorate, and age at the time the doctorate was awarded. However, the percentage of respondents with a major in education at the baccalaureate and master's levels was less than the national norm for doctorates in education. Also, fewer women respondents received a doctorate in higher education, compared to the national percentage of women doctorates in education.

In the last position of employment before beginning doctoral studies, 71 percent of the respondents were employed in government or nonprofit associations related to higher education and in institutions of higher education. This percentage increased to 93 percent for the first post-doctoral position and to 91 percent for the current position. With reference to type of employer, senior colleges and universities were the major employers for the respondents' last predoctoral, first postdoctoral, and current positions.

The leading functional areas of employment in all three positions of employment were academic affairs, teaching, and student affairs. Business affairs and development were the least represented functional areas of employment. The percentages of respondents who were employed in the first and second hierarchical levels for each position were as follows: last predoctoral—24 percent, first postdoctoral—22 percent, and current—26 percent.

In terms of the beginning annual salary for the doctoral graduates' first post-doctoral positions, the mean annual salary for each year in this study was as follows: 1963—$10,969, 1966—$12,464, 1969—$14,405, and 1972—$15,803. The average number of positions, including different positions at the same institutions, held by the respondents since they received the doctorate was 2.1. The average number of different employing institutions and organizations during the respondents' employment since receiving the doctorate was 1.6. Since receiving the doctorate, the typical 1963 doctoral graduate was employed in three positions by two different employers. The typical 1972 doctoral graduate changed employers within 18 months after receiving the doctorate. Since award of the doctorate, the average percent of time the respondents were employed in positions related to higher education was 92 percent. Approximately 50 percent of the geographic locations of the respondents' predoctoral, postdoctoral, and current positions were concentrated in the five states of the doctoral granting institutions included in this study.

Three aspects of the respondents' professional activities were identified and analyzed. These activities included publication of the dissertation, the number of books and articles published, and the number of memberships in professional associations and societies. Of the 415 respondents, 87 (21

percent) had published their dissertations in part and 26 (6 percent) had published their dissertations in full. In terms of books and monographs, 28 percent of the respondents had published one or more books and/or monographs and 46 percent had published one or more articles. The average number of memberships in professional associations and societies was 3.2 and the range was zero to 15.

A comparison of the respondents' ratings of competencies useful in present positions with competencies developed in their doctoral programs indicated that more emphasis in the doctoral program should be given to:

1. Supervising work of others
2. Problem solving and decision making
3. Planning techniques
4. Developing and interpreting budgets
5. Interpersonal relationships and group dynamics
6. Effective teaching
7. Advising and counseling

In rating the relevance of their doctoral programs to subsequent professional duties, 84 percent regarded their programs as relevant or highly relevant. Less than 3 percent of the respondents considered their programs irrelevant. Approximately 76 percent of the respondents indicated that they would select higher education as their major if beginning doctoral work over again.

CHARACTERISTICS OF SEVERAL CURRENT DOCTORAL PROGRAMS AND OF MEMBERS OF APHE

Naomi Ross
The Pennsylvania State University

There are currently many questions about programs of higher education as they exist and as they might exist, about graduates as they are currently constituted, and about students who might become graduates. Therefore, Dorothy Truex and I sought by questionnaire to obtain specific information about professors and programs of higher education. We wondered who taught in such programs, who enrolled, who graduated, what graduates did, what programs were like, and where there seemed to be problems.

We have some information but not the definitive answers for which we had hoped. Nevertheless, some progress was made. For example, a number of programs responded about current admissions and the ethnic, sexual, and racial breakdown.

Questionnaire to Programs

Purposes:

—To get a profile of the students, according to: ethnic/racial background, sex, full- or part-time status, and GRE or MET scores.

—To get a profile of who enrolled for what degrees.

—To get an idea of what financial assistance was available.

The following people assisted in compiling the data and in analyzing it: Janet Bacon, Joan Eschenbach, Howard Miller, Cheryl Toronyi, and David Watkin. This questionnaire and this report were made possible by a contribution of the Center for the Study of Higher Education at The Pennsylvania State University, directed by G. Lester Anderson.

Questionnaires were sent to 12 programs, 7 of which eventually responded with answers to some of the questions. The most serious oversight of the questionnaire was the failure to distinguish between "students enrolling," "students admitted," and "students applying." In addition, because we asked for information such as race, that is not part of the regular forms, many programs indicated that their responses were only estimates.

The findings are reported below:

DATA ON PROGRAMS OF HIGHER EDUCATION (N=7)

TABLE IA

Category	#	Range	N
Admitted[a] to doctoral program	124	8-44	6
Admitted to master's program	87	4-50	5
Women admitted to doctoral program	63	2-30	7
Women admitted to master's program	50	7-28	4
Blacks admitted to all degree programs	37	3-18	6
Spanish-speaking/Chicanos admitted to all degree programs	12	2-10	2
Native Americans admitted to all degree programs (Not usable, as several seemed to interpret this as native-born rather than American Indian)			
Orientals admitted to all degree programs	1	1	1
Assistantships available[b]	17	0-4	6
Scholarships/Fellowships available[b]	56	0-20	5

Note.—GRE Scores: N = 4; x = 1069; R = 963 - 1160
MAT Scores: N = 1; x = 58

[a] "Admitted" was the term used, but some interpreted it as "enrolled."

[b] Several programs mentioned campus-wide or state-wide opportunities available to students.

TABLE IB

Category	Ratio Range	N
Women in doctoral programs::Total in doctoral programs	1/3 - 1/5	5
Women in master's::Total in master's	1/2 - 1/7	3
Blacks in all degrees::Total in all	1/2 - 1/5	5

Conclusions seem not to be warranted, but there are plenty of further questions suggested (not to mention questionnaire improvements).

Questionnaire to APHE Members

Purposes:

—To find out what were the major professional tasks of members of APHE.

—To find out the extent of teaching engaged in by APHE members.

—To find out what trends, if any, existed in type and number of degrees earned by members.

—To find out where members had earned their degrees.

We had an overwhelming response to our request for data from APHE members. The total number of people responding was 164 of a mailing of approximately 200. Again, there were some problems with the way questions were interpreted, stemming primarily from the attempt to separate teachers, researchers, and administrators. When people were asked to say how many years they had been employed *primarily* in one of these roles, many noted that teachers are also researchers. To accommodate this, some apparently divided into two parts the total number of years they had spent as teachers, putting one-half in the "teacher" category and one-half in the "researcher" category. (I was thinking of this as a category for people who are institutional researchers and center/institute professionals who teach a course now and then.) In addition, some of those people surveyed were students. When they were also employed or had been employed in some capacity, we included them in the data.

Results are reported below:

DATA ON MEMBERS OF ASSOCIATION OF PROFESSORS OF HIGHER EDUCATION

TABLE IIA

Category	Mean	Range	N	No "N A" or "O"
Yrs. taught at least 1 course	6.2	0-32	164	15
Courses taught/year[a]	4.3	0-12	164	24
Yrs. since earned doctorate	12.4	0-42	164	6
Yrs. primarily as administrator	8.6	0-33	164	31
Yrs. primarily as teacher	4.3	0-30	164	60
Yrs. primarily as researcher	1.4	0-12	164	113
Wks./yr. consulting	2.5	0-36	164	47

[a]Composing close to 50% of membership responding.

1. 47.6% have taught *4 years or fewer.*
2. 48.8% have taught *three courses or fewer/year.*
3. 49.4% earned doctorate *1-9 years ago.*
4. 64.7% have degrees in *administration or higher education.*
5. 43.8% have degrees from Florida State (N=10), Michigan State (N=8), University of Michigan (N=13), Columbia Teachers' College (N=11), Syracuse (N=9), Ohio State (N=11), and University of Wisconsin (N=8). AAHE members have degrees from 46 different institutions.
6. 84.2% have been employed at least 1 year primarily as administrators for 6 years or fewer.
7. 50% have been employed primarily as *teachers from 1-5 years inclusive.*
8. 53% did consulting from 1-3 weeks last year (1972-73).
9. 45.6% list governance/administration as a specialty first. Other specialty areas (as broken into categories after the questionnaires were returned) included: curriculum; college teaching; student personnel; history, sociology, philosophy; research and evaluation; and community college. Twenty-three people listed no specialty or more than three.

TABLE IIB

Specialties Listed First	N	Specialties Listed Second	N
Governance, administration	73	College teaching	11
Community college[a]	20	Student personnel	8
Curriculum	18	Governance, administration	7
History, sociology, philosophy	14	Curriculum	6
Student personnel	9	Community college[a]	5
Research and evaluation	4	Research and evaluation	2
College teaching	3	History, sociology, philosophy	1
Miscellaneous	23	Miscellaneous	3
	164		43

[a]Community college administration was classed with "administration."

Several conclusions present themselves, with the major (and obvious) one being that higher education is a young field, oriented toward governance and drawing some of its support from people who have been or are presently administrators.

Functions of Professors of Higher Education Focused within or outside of the Institution

INTRODUCTION BY W. FRANK HULL IV

E. D. DURYEA • G. LESTER ANDERSON

SECTION III

INTRODUCTION

W. Frank Hull IV
University of Toledo

What kinds of "service" are appropriate to professors of higher education? Should their "service" be particularized to assist their local institution? Or, should their "service" be generalized to assist state and national bodies, as well as other institutions of higher education in the region, state, and/or nation? Should their main efforts be "intellectual," concentrating on theory, or should they be more closely connected and involved with actual problems, trying to resolve theoretical concepts while engaged in the daily processes of institutional operations? Where should the emphasis be? In short, what does the word "service" on our annual reports mean for professors of higher education?

E. D. Duryea suggests how the "service function" of a professor of higher education complements a graduate department of higher education, in which "students, in turn, find an opportunity to think about the nature of higher education in broad perspective, free from the immediate pressures of a job for probably the only time in their professional careers." G. Lester Anderson illustrates some of the implications of Professor Duryea's concepts through reference to the historical development of one group of professors of higher education organized within a "center," apart from yet in cooperation with a department of higher education—a group of professors who do provide specific "service" to the institution in which they are located.

Are Professor Anderson's and Professor Duryea's concepts of "service" compatible? On first reading one feels they are quite similar, but after re-reading, one senses subtle differences. Both groups (the department and the center) are organized to provide specific "services" in the wider sense, but the notions of "service" are distinctive. Are both definitions applicable to today's institutions? What about those institutions without the resources or reputation of a Penn State? The Anderson team functions not unlike a group of professional consultants able to assist the local institution, even in major ways, yet feeling itself comfortable in asserting that academic freedom has "been sustained." In some senses, Duryea's faculty member

has a less direct relationship to the institution and, to be sure, many professors of higher education find themselves with absolutely no more involvement with the issues confronting the institution than does an individual in any other discipline.

There is, then, the interesting issue of the "contemplative" nature of professors of higher education. How close to the pragmatic realities of institutional life should the professor be? How might such proximity influence the professor's appropriate "service"? Is there an educational leadership role implied in the function of the professorship of higher education?

"Service," what is appropriate and/or our aim? When and how do we leave our academic chambers and apply our skills to institutions of higher education in such a way that our students do not learn merely how to replicate the past, but, indeed, how to create the future?

SOME THOUGHTS ON THE SERVICE ROLE OF DEPARTMENTS OF HIGHER EDUCATION

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In thinking about the question of the service function of departments of higher education, it seems to me that it is important first of all to make clear one's perceptions of the nature of graduate education in this area and of what one means by service. Therefore, initially let me very briefly attempt to explicate my thinking on both.

A department of higher education consists, to my thinking, of students and faculty members joined in an effort to understand the nature of the academic enterprise in the United States, its relationship to the general society, and its role in relation to a variety of postsecondary educational activities. For faculty members, a higher education department offers the opportunity to develop their comprehension of the enterprise and to use this understanding in meeting their responsibilities for the guidance of student learning and the evaluation of student achievement. I suggest further that students, in turn, find an opportunity to think about the nature of higher education in a broad perspective, free from the immediate pressures of a job for probably the only time in their professional careers. Three or 4 years are available in which to examine critically the more significant aspects of the field in which they will work. I am suggesting, therefore, that higher education rather than administration, and an intellectual rather than operational focus, constitute the more appropriate (although by no means exclusive) concerns to be addressed by our departments.

In the sense which I believe it is intended for this discussion, service consists of the activities by means of which students of higher education (who can be both graduate students and faculty members) extend the benefits of their expertise beyond the teaching-learning relationship. In terms of the above view of graduate study, clearly I view service as an activity associated primarily with faculty members, although equally clearly it is an activity in which graduate students also can participate. In certain respects I am sure they regularly do this through involvement in internships and in research and other projects associated with departments.

In thinking from such baselines as the preceding, I must admit to a serious reservation regarding whether the service function properly belongs to a department as such. I would say first of all that departments exist primarily

to offer graduate degree programs designed for students engaged in or planning careers in higher education, as noted above. I would suggest, therefore, that a department must look first to the teaching-learning activity associated with formal courses, seminars and independent study, dissertation guidance, and counseling in the sense of working with students on matters related to their professional aspirations.

In support of this educational responsibility, it is assumed that faculty members will themselves continue to grow professionally, learning more about their own specializations and engaging in, at a more advanced level, the same kind of systematic study which they expect of students. Traditionally this activity has been viewed in terms of research and conceptual scholarship. However, in line with other professional areas and even many of the disciplines, the activity of research and scholarship has been extended to include other kinds of professional endeavor related to the application of a professor's expertise to problems and issues of general concern in higher education. One might call this, I suppose, applied research.

In the above sense, departments of higher education provide a service to higher education in general and to other facets of the society which have a relationship to or concern about higher education. However, it seems to me that this kind of service is carried out on a personal rather than departmental basis, in the sense that the professor does this as a part of his or her professional development (for which he or she may or may not accrue financial profit). One would assume, also, that this kind of expertise would have value to the university in which the department is located and that the faculty member would by the nature of things make available this expertise both to administrative heads and to faculty committees.

The main question, I believe, is whether a department *as a department* ought to engage, formally at least, in the service function. My response to this question would be to suggest that this function be institutionalized by an activity administratively separated from the department. The device commonly used to this end is a center or institute for higher education which certainly employs the services of departmental staff but does so through formal arrangements which recognize and protect the primary responsibilities for teaching and scholarly development. Precedents exist for this organizational separation which implements a service responsibility and even involves professional staff members whose primary assignment is to the center or institute rather than the department. Examples which come to mind are the centers in Berkeley, Pennsylvania State, and Georgia.

If one were to take the view that a department might appropriately engage in research, study, and applications in higher education or were such a center to be established in conjunction with a department, it would be necessary to distinguish between its role and that of an office of institutional research which traditionally is viewed in a staff function for administration. To combine both, in my judgment, based upon a kind of Parkinsonian view,

would be to subordinate significant study about higher education to the more immediate needs of managerial decision making. In raising this danger, –to my mind inevitability –I do recognize the need for the more pervasive, long-range study essential to institutional planning. One can argue persuasively that such broader view ought to constitute an essential facet of institutional research and that departmental expertise is of unquestioned value for its accomplishment. In defense of my position, I would stress the point that the use of departmental faculty members for this end should depend upon formal arrangements which recognize the primary teaching and scholarly concerns and thus upon administrative initiative rather than some form of ongoing departmental service. Certainly, such contributions might constitute an inherent aspect of a center. Pennsylvania State University, for example, is committed to conducting "studies which have significance for colleges and universities generally but which also have relevance to higher education in the Commonwealth of Pennsylvania."

In conclusion, let me reaffirm the two considerations upon which my position rests. One, an operational factor, anticipates that a formal involvement in service to the president or administrative cadre of an institution will inevitably lead to pressures which detract from the primary activities of teaching and professional scholarship. Administrators inevitably have to respond to decision making in an immediate context and they need data and information which assist them to this end. Hopefully they give attention to long-range planning and do take advantage of an expertise available from departments of higher education but in a consulting rather than a direct service capacity. The other rests upon the belief that what faculty members do professionally should relate to their role as members of a graduate faculty and thus to the enrichment of their contribution to the teaching-learning activity. This latter consideration, not the value of their expertise to their institutions, must dominate their use of their professional time and effort.

And it follows, I believe, from such considerations that the service function belongs more appropriately with a center or institute designed to serve the needs of higher education as an enterprise. Participation by faculty members and students in such institutes or centers clearly is desirable. But equally clearly it should be arranged in a manner which supports rather than erodes their departmental obligations.

CENTER FOR THE STUDY OF HIGHER EDUCATION: A CONSULTANT IN RESIDENCE ROLE?

G. Lester Anderson
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The Pennsylvania State University Center for the Study of Higher Education was established by trustee action in February 1969. The first and only director to date assumed his duties on April 1 of the same year. He was made responsible to the provost of the university, and was assigned a lump sum of money with which he was to prepare a budget for t' e first year's operation. He was to seek outside funding for special projects but the university money was more than ample to maintain a viable Center. These data, particularly as they relate to funding of the Center, have a particular relevance to the roles the Center has played, as will be developed later, and which are the focus of this paper.

Immediately on assuming his position, the director began to recruit a staff.[1] One research associate was appointed on a tenure track basis and another on a temporary appointment. A third person was appointed a half-time staff associate (a more modest appointment than research associate), and a second half-time associate was given a 1-year appointment with a specific and somewhat esoteric assignment. The director and the two research associates were given faculty appointments in the College of Education and immediately began advising students, directing the research of doctoral candidates, and teaching one class each term. During the spring of 1969, four graduate students accepted half-time assistantships and one became a full-time assistant as his work for his degree was nearly completed.

Not until July 1, 1973, was the Center fully staffed. There had been one resignation from the Center; the person who was originally appointed on a temporary basis later accepted a permanent appointment and is now a senior administrator in the university. The Center now has six fully

[1] A decision had been made when the Center was organized to seek persons more interested in policy (e.g., governance) and occupational-professional education than in instruction and student evaluation. A Division of Instructional Services accepts these types of responsibility in the university.

professional research associates, all with doctorates (this number includes the director). Four are fully budgeted in the Center and two have their salaries divided between the Center and the College of Education. All have faculty appointments; two have tenure and four are eligible for tenure. It should be observed that two full-time tenured members of the college carry full-time responsibility for teaching, advising, and pursuing their own scholarly activities in the section for higher education in the college, i.e., they are not on the Center staff.

A preliminary statement of potential Center roles was prepared at the time the Center was authorized. These roles were tested during the Center's first years and have been modestly modified. The Center has always been an "open" organization, free to redirect its efforts within wide boundaries, and minimally organized in bureaucratic terms. It has had responsible yet modest direction and supervision from the central administrative officers to whom the director has been responsible. In other words, the Center has had a high degree of autonomy. The program which has emerged has not been dictated by higher authority (although they have sanctioned it), but has flowed from a professional commitment and obligation on the part of the staff.

After nearly 5 years of activity, the Center can define its current roles as follows: (1) It supports the program in the college as suggested above. All six senior professional staff teach in the program. Currently it carries seven graduate students in higher education who receive stipends and tuition remission. It has partially funded the research projects of some twenty candidates for the doctorate. (2) It carries on studies—bibliographical, literature reviews, analytical and synthesizing, as well as data-based, that relate to matters of higher education policy or operation. These studies are designed to have relevance to Penn State University or to higher education in the Commonwealth. However, they are also generally of interest to the higher education community of the nation. These studies are published as "numbered reports" or as monographs. Generally 1,000 copies are "printed." They are distributed, without cost, on a selective basis from a rather extensive mailing list of those who are interested in higher education policy or operation. The lists are heavily weighted to persons at Penn State or in Pennsylvania, but more than 100 names on the list are of persons in other states or in the District of Columbia. (3) The Center serves the Penn State University community in a role that is perhaps described as "consultants in residence." The Center does not, however, function in terms of a standard *institutional research* organization. Such an institutional research office does exist in the university as a part of the organization associated with university planning and budgeting.

It is the third role that will be further described in this paper. One of the Center's first efforts was a request from the president of the university to present a variety of designs for a university senate, as the senate then in being was being reorganized and its authority modified. The Center responded. Happily, one of the Center staff had done significant research on faculty participation in governance, including roles of faculty working in or through senates. Under the direction of this staff member and with the

assistance of two graduate students, a report was prepared that satisfied the president, was generally praised, and was influential.

Two of the Center staff in its first years gave assistance to the president and his associates in analyzing a draft document of a State Master Plan for Higher Education and preparing papers responsive to it. The prose of one of the staff was embodied in the final published state plan.

In its first years under President Oswald, the university prepared its own *Academic Policy Plan*. A Commission on Planning and three Task Forces had been designated by the president to be involved in the university planning activity. These operated under a vice president for planning. Three Center staff served as consultants to the Commission and the Task Forces. Several background draft papers were prepared by Center staff. Three of the graduate assistants from the Center interviewed faculty and administrators under the supervision of a planning staff associate gathering data relative to planning. Three of the staff were members of a committee of seven that wrote the final report. The contribution of the three was considerable.

During the last several years, a variety of activities directly related to university operations have been carried out. A study was made for the graduate school that evaluated an "exceptional admissions" program. An earlier paper prepared by a graduate student on the staff dealt with the university's response to the challenge to enroll and educate disadvantaged students. One staff member prepared three background papers for a University Commission on the Open University. The entire Center staff met with the committee on academic affairs of the faculty senate for an entire morning, reviewing for the committee current critical issues in higher education with special emphasis on the Carnegie Commission's publications. On another occasion, three of the Center staff worked with a senate committee that was charged with the responsibility of reviewing and revising general baccalaureate degree requirements. In addition to participation in committee discussion, two background papers were prepared for the committee. Interestingly, each paper has had journal publication.

Two conferences organized by Center staff were conducted in association with the Graduate School. At one, deans of the university and state community college presidents discussed for a day graduate school programs relevant to community college teaching. A second conference brought together deans or directors of the graduate divisions of the state colleges and deans of university graduate schools. Graduate professional education, and specifically the professional master's degree, was the principal topic of this conference. A more tangential, yet important service of the Center, is cosponsorship and support of an annual fall conference concerned with occupational-vocational education in community colleges. The person who organizes this activity is a professor of vocational education.

The Center staff member whose principal interest is governance has given major attention in the last 3 years to faculty unions and to the processes of

collective negotiation or bargaining. Because of his expertness in this area, he was asked by the university senate to speak to it about faculty unionization, descriptively and analytically. From the spring to fall of 1973, he addressed approximately twenty different college, branch campus, or departmental faculty meetings on "Issues in Collective Bargaining." From December 1972 to the present, this staff member has been on a half-time appointment as special consultant to the president (of the university, that is) directing the university's planning efforts in preparation for collective bargaining, should it come. This assignment has involved writing background papers, directing institutional research type studies on matters relevant to faculty unionization, and preparing contingency plans. This assignment terminates December 31, 1973. It should be noted that this role has been fulfilled without partisanship. Neither the faculty nor administration can validly assert that this staff member is either "pro or con" relative to unionization.

Another staff member who has expertness in graduate education, in studies of students, and in manpower studies has served as "consultant" to several university committees—graduate and administrative. He worked on the "productivity" problem for the university's council of academic deans. He supervised the work of a graduate student who organized and interpreted data concerning students in the College of Liberal Arts. He made a presentation of the findings to the faculty of this college. He has also been a university representative to statewide councils and committees and to national conferences in these and related fields.

Another member of the Center staff has become particularly useful to the president's office as an outgrowth of his work with certain national organizations and national study groups. This person has been in the midst of the present nationwide discussion over how higher education should be financed in the coming decades. Pennsylvania higher education institutions are attempting to formulate a unified position regarding higher education financing in the Commonwealth, and this person has been a primary staff resource for the development of related documents.

This same individual, again acting in a consultative role, has advised the university's director of federal relations. The tasks this staff member has performed have included the provision of data and the development of position papers concerning alternative methods of higher education finance that might be adopted nationally. While being careful to preserve the scholarly objectivity of the staff member, the university's federal representative has seen to it that the Land-Grant Association, the National Postsecondary Finance Commission, the House Committee on Education and Labor, and selected congressmen among other groups and persons have had the benefits of inputs from this colleague in the Center.

Still another staff member was asked to make a survey and analysis of the programming and administration of an upper division branch campus of the university that was still young and was in the process of continuing program development. This report was prepared with the considerable assistance of the students in a class taught by this staff member. In addition to preparing

the report, this staff member has met with faculty and administrators of this campus to discuss his findings and recommendations. It is assumed that this report will be basic to planning for the future by this university unit.

A final activity will be noted. The university president expressed concern in the summer of 1972 that the university should subject itself to a thorough program review. The president asked the Center director to prepare a paper that might be the basis for a program review plan, including a process. This was done. Coincident with this activity and correlative to it, the Center director assisted the university council in preparing a paper that could serve as a base for priority decision making concerning new programs. Plans are now nearing completion for university-wide program review, and the process and plan is a refined and modified plan flowing from the original papers prepared by the Center director. Not unrelated, it seemed important that the College of Education, confronted with the task of finding a dean, subject itself to an intensive and comprehensive review of its program, looking forward to a contemporary statement of its mission, a modification of its organization, and a plan for programming in terms of both established and speculative trends. The director of the Center is now serving as acting dean of the college and is directing the college's study of itself.

What observations are in order concerning this "consultants in residence" role for the Center and its staff? The Center has never explicitly reviewed this role. The following observations seem valid. By and large no staff member feels he has been imposed upon. Perhaps 10 to 25 percent of a Center staff member's time in any given year is spent in such activity as described above. In two instances it has resulted in special assignments that have required one-half to three-fourths of a member's time for a year. In another instance, the service of a Center staff member was not entirely unrelated to his appointment to a senior university administrative position. The service described in this statement has given the Center above average visibility in the university. The quality of the service has generally elicited favorable reactions from university faculty and administrators. The Center believes it has strong support from university administrators, including the president and the provost. Not unrelated to this support is that the staff are reasonably well supplied with secretarial help and a support staff of graduate assistants, a computer and statistical staff assistant, and an editor. In addition, the staff have a flexible schedule, a modest working library, generous professional travel funds, the stimulation of very active professional associates, and, of important significance, major interaction with colleagues in the various departments and colleges of Penn State. Many of the activities carried out have been professionally interesting and rewarding. Each staff member believes that he has been able to maintain a high degree of professional autonomy even though he may be serving a central administration. Finally, and of fundamental significance, no staff member has felt that his professional and scholarly integrity has been compromised nor has he felt constraints put upon him in expressing professional judgments, even though these judgments may not be shared by his university administrative or faculty colleagues. Academic freedom has been sustained.

PROCEEDINGS of the
THIRD ANNUAL MEETING
of the ASSOCIATION OF
PROFESSORS OF
HIGHER EDUCATION

Chicago, Illinois
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